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ABSTRACT

The Kentucky Education Reform Act (KERA) Preschool Programs is a comprehensive early childhood educational delivery system that provides developmentally appropriate practices to children, integrated services to families, and interdisciplinary and interagency collaboration among organizations serving young children in Kentucky. This report evaluates the preschool program that targets 4-year-old children from low-income families and children ages 3 or 4 with a disabling condition. A cost benefits evaluation examined whether the funding amounts and methods associated with the programs were sufficient and appropriate, and the nature of projected future cost factors affecting the program. A student outcomes evaluation investigated the extent of improvement in student total development and outcomes, and identified other areas of effect. A programmatic components evaluation examined whether the components required by KERA were effectively implemented and what overall improvements must be made to achieve optimum success. Summaries, conclusions, and recommendations are included for each area of evaluation. (MM)

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ED 363 415

Third Party Evaluation

KENTUCKY EDUCATION REFORM ACT (KERA) PRESCHOOL PROGRAMS

FINAL REPORT

July, 1992

College of Human Environmental Sciences
and
College of Education

University of Kentucky
Lexington, KY

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Third Party Evaluation

KENTUCKY EDUCATION REFORM ACT

Preschool Programs

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Third Party Evaluation

KENTUCKY EDUCATION REFORM ACT
PRESCHOOL PROGRAMS

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INTRODUCTION

The underlying assumption of the Kentucky Education Reform Act is that all students can achieve at high levels and that it is the responsibility of the public schools to ensure that all students have the opportunity to reach these high levels and to make demonstrable progress toward achieving Kentucky's Six Learning Goals identified by the Council of School Performance Standards:

* Use of basic communication and mathematic skills;
* Application of core concepts and principles from mathematics, the sciences, the arts, the humanities, social studies, and practical living studies;
* Becoming a self-sufficient individual;
* Becoming a responsible member of a family work group or community;
* Thinking and problem solving; and
* Connecting and integrating new experiences and knowledge.

A Comprehensive Preschool Program

Legislators recognized that the best way to enhance children's chances for success in school and their attainment of high levels of achievement is to ensure that all children get off to a good start in school. Thus, a new tuition-free statewide at-risk preschool program was created to help young children reach their full potential. The KERA Preschool Programs concept is a comprehensive early childhood educational delivery system which provides developmentally appropriate practices to children, integrated services to families, and interdisciplinary and interagency collaboration among organizations serving young children in Kentucky.

Eligibility. In keeping with the goal of KERA to equalize educational opportunity for all students, the preschool program targets four-year-old children from low-income families and children age three or four with a disabling condition. Each school district is required to make services available to eligible children, either directly or by contract with another public or private organization (KRS 157, Sections 15, 16, and 17). The implementation of the preschool program was optional in 1990-1991, but mandatory in 1991-1992.

Children who are at-risk are identified based on federal school lunch program eligibility criteria for free lunch. Other four-year-old children may be served to the extent placements are available. In compliance with the federal mandate for preschool services for children with disabilities under P.L. 99-457, educational services will also be provided for three- and four-year-old children with identified disabilities. They will be classified into three groups according to degree of disabling condition: speech/language disorders only, mild to moderate disabling conditions, and more severe disabling conditions. Amount of funding will be based upon the severity of the child's disabling condition.

Developmentally Appropriate Program. The four-year-old program is a developmentally appropriate preschool program which focuses on the physical, intellectual, social, and emotional development of young children. In keeping with the guidelines of the National Association for the Education of Young Children (NAEYC), the administrative regulations (KRS 156.160) stress the creation of a safe, secure learning environment that provides for children's active involvement in their own learning, that enables each child to progress at his/her own rate, that includes a meaningful curriculum that is both relevant and concrete, that nurtures self-respect and fosters positive self-esteem, and that involves parents and supports their efforts to help their children learn. Provisions for meeting children's individual needs must be made with special attention to adaptations necessary for meeting the needs of children with disabilities.

PURPOSE OF THIRD PARTY EVALUATION

The overall goal of this evaluation was to determine whether the KERA Preschool Program helps the children who participate to succeed in school and eventually in life. The sources and amounts of funding, the types of expenditures, the quality of preschool classroom environments, and children's attainment of developmental milestones were studied. Since the funding for the program requires major expenditures of state funds, this evaluation will help the Kentucky Department of Education (KDE), the Kentucky General Assembly's Legislative Research Commission, the Governor's Office on Policy and Management and the Office of Educational Accountability judge the implementation and efficacy of the KERA Preschool Programs.

More specifically, the third party evaluation focused on the following goals in the three major areas:

Goals of Part I: Cost Benefits Evaluation

The purpose of the Cost Benefits evaluation was to help decision makers determine 1) whether the funding amounts and methods associated with the programs are sufficient and appropriate and 2) the nature of projected future cost factors affecting the program.

Goals of Part II: Student Outcomes Evaluation

The purposes of the evaluation of Student Outcomes were to help decision makers judge 1) the extent of improvement in student total development and outcomes, and 2) identify other areas of effect.

Goals of Part III: Programmatic Components Evaluation

The purposes of the evaluation of programmatic components were to help decision makers determine 1) whether the programmatic components required by KERA were effectively implemented and 2) what overall improvements must be made to achieve optimum success of the program.

SAMPLING STRATEGY

The design used a stratified random sample that incorporated components including geographic location within the Commonwealth, economic development of the district, and type of program (district provided versus contracted).

Figure 1 contains a schematic representation of the sampling strategy. The sampling strategy involved selecting KERA Preschool Programs from three geographic locations within the state (Eastern Kentucky, Central Kentucky, and Western Kentucky). An additional consideration in the sampling strategy was the economic development of the community. This sampling strategy resulted in six cells as seen in Figure 1 (see p. 5).

Within each cell six school districts were randomly selected to participate in the evaluation. The districts were selected based on the type of program they provided. Program type was defined by the funding source used to create and operate the program. The programs were divided into district programs and contracted programs. District programs were those programs that existed exclusively on funding provided by KERA. Contracted programs were those programs in which the district contracted with a private provider or a provider other than the district to provide services for children eligible for KERA funds. Within each cell six districts were identified. Four district preschool programs and two contracted programs were selected from each cell which yielded a total of 24 district and 12 contracted programs. Districts selected for participation are shown in Figure 2 (see p. 6).

The preschool coordinator was then asked to identify two potential sites within the district in which children could be tested. Once the programs were identified, a total of 11 four-year-old children identified as at-risk and 3 with disabilities were randomly selected from the programs in each district.

In addition to testing three- and four-year-old children, two groups of kindergarten children were tested. They were divided into groups according to whether or not they had been in a KERA Preschool Program the previous year. Kindergarten children were randomly selected from kindergarten programs located in the same sites as the preschool programs identified for the three- and four-year old sample.

This sampling strategy was designed to yield a sample representative of programs throughout the Commonwealth.

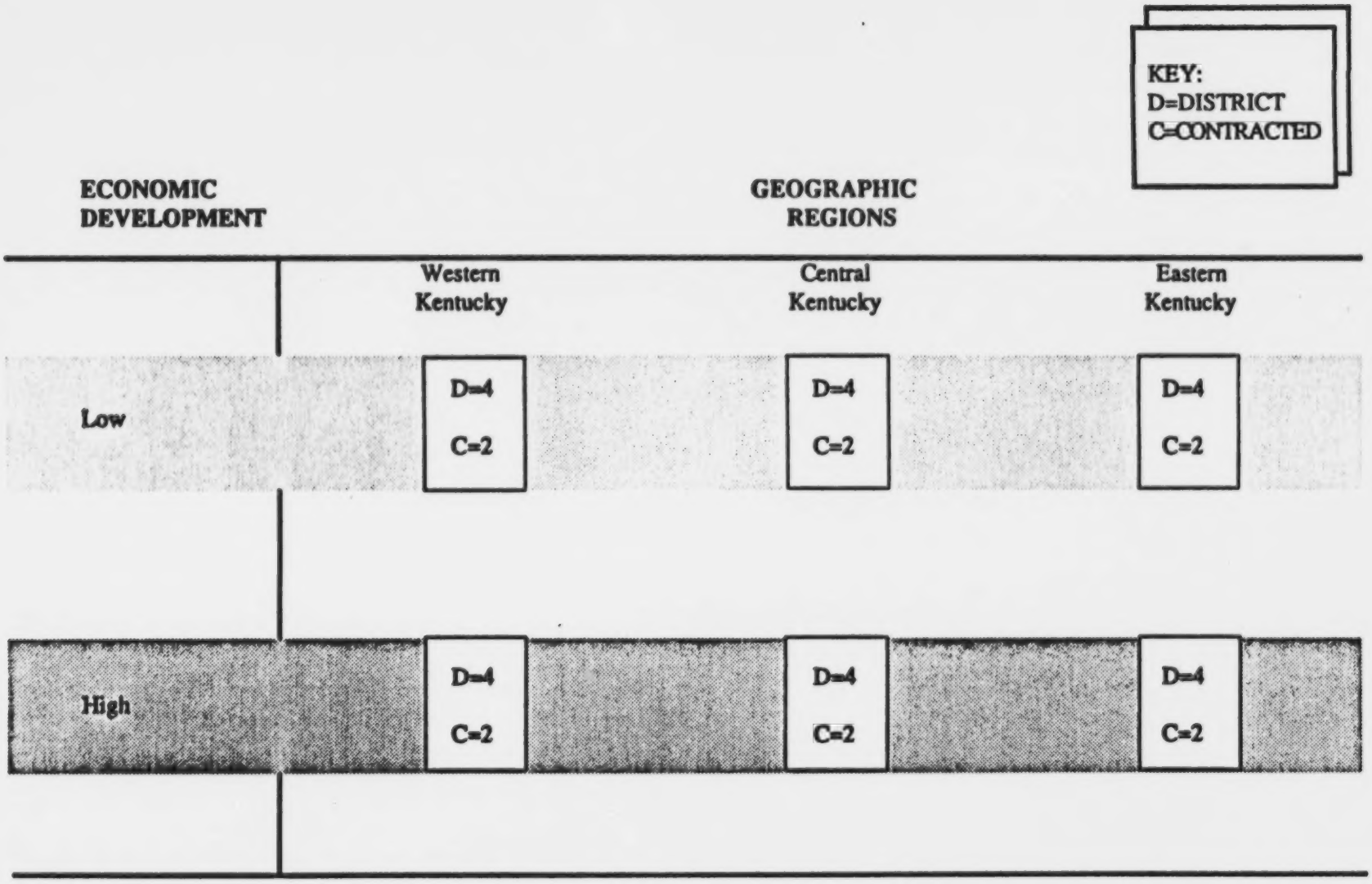

Figure 1. Sampling Strategy

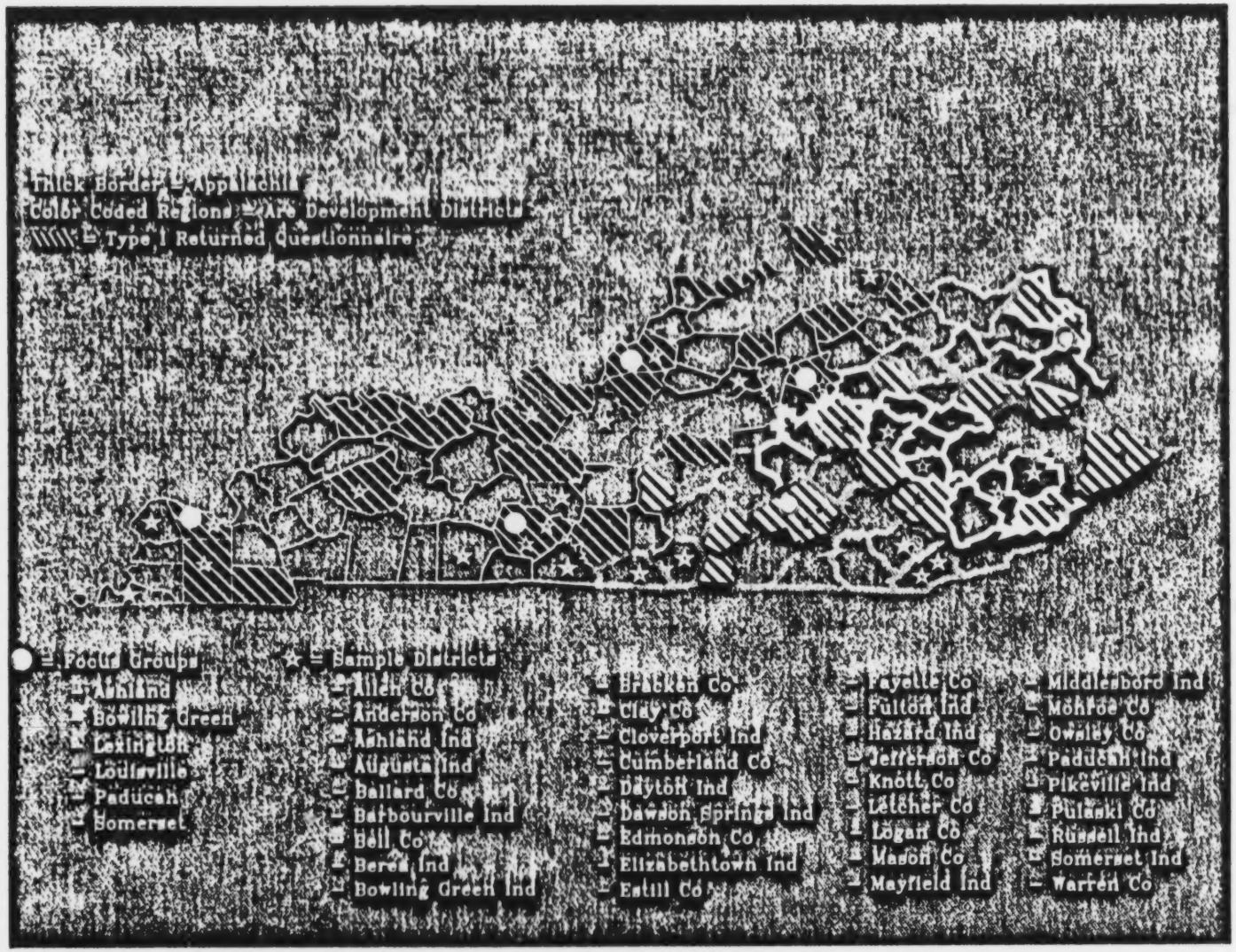

Figure 2. Kentucky map with sampled districts, locations of focus groups and districts from which Type I questionnaires were returned

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EVALUATION AREA PART I: COST BENEFITS

GOALS OF EVALUATION AREA PART I: COST BENEFITS

The goals of the cost benefits evaluation were to provide a third party evaluation that will help decision makers determine 1) whether the funding amounts and methods associated with the programs are sufficient and appropriate and 2) the nature of projected future cost factors affecting the program.

For the 1991-92 school year, school districts provided preschool programs for four-year-old at-risk and three- and four-year-old children with disabilities by either providing the services themselves within the district, cost sharing with another district or Head Start program, or by contracting for services with another district, Head Start, or private child care provider.

Data Collection Procedures and Data Sources Used in Cost Benefits Evaluation

Major sources of data included the 1991-92 KERA Joint Preschool Proposals, Mid-Year Financial Reports, Final Count Forms, Type I Questionnaires, and District Program Implementation Questionnaires.

1991-92 KERA Joint Preschool Proposals. These proposals submitted by all districts provide information regarding anticipated program characteristics, projected allocation of KERA funds, and anticipated child counts. The KERA Joint Preschool Proposals are a program planning device and are useful in this analysis of reported program plans and anticipated funding sources submitted to the Early Childhood Division of the Kentucky Department of Education. A copy of the Joint Preschool Proposal is provided in Appendix A.

Mid-Year Financial Reports. The mid-year financial reports were used to determine actual allocations of funds and actual child counts as reported to the Kentucky Department of Education. Copies of financial report forms are provided in Appendix A.

Final Count Forms. The official--September 30--count of children eligible for Preschool Programs is filed with the Kentucky Department of Education and is the basis for

the final allocation of KERA Preschool funds. A copy of the Final Count Form is provided in Appendix A.

Type I Questionnaires. Questionnaires were sent to a random sample of Type I licensed child care facilities in the state of Kentucky. Three-hundred-forty Type I childcare facilities were selected from the 1,800 child care facilities listed with the Department of Social Services in the Cabinet for Human Resources. Each questionnaire included a budget and personnel page.

District Program Implementation Questionnaires. District questionnaires were mailed to each of the 176 school districts. Each implementation questionnaire included a budget and personnel page. Approximately one month after the first mailing, another copy of the budget and personnel center page was mailed to each district from the KDE Division of Early Childhood office. Copies of Type I and District Questionnaires are provided in Appendix B.

KERA PRESCHOOL PROGRAM FINANCIAL DATA

The district mid-year financial reports provided to the Kentucky Department of Education provide expenditure data through the end of the second quarter. Final count forms filed with the Kentucky Department of Education provide the official number of children eligible for each KERA Preschool Program and are the basis for allocation of KERA Preschool funds to each district. Table I.1 indicates the number and percent of children served according to criteria for program eligibility. Official count data indicate 12,540 children participated in KERA Preschool Programs for the 1991-92 school year. Of the 12,540 children participating, 1,056 were non-eligible four-year-olds. Some districts accepted four-year-old children who exceeded the income limit either because they had openings in their programs or the district was willing to provide KERA Preschool programming to four-year-olds otherwise ineligible. Of the total number of children served 8% did not meet eligibility criteria.

Table I.1

Number and Percent of Children in KERA Preschool Program
Official Count Data (n = 167)

Program Type Eligibility	Number	%
Four-year-olds At-Risk	6,816	54.35
Disabled	4,668	37.22
At-Risk and Disabled Total	11,484	91.58
Non-eligible Participating 4 Year-olds	1,056	8.40
Number of Children Served by KERA Program	12,540	100.00

Over half (59%) of the total number of children eligible were four-year-olds at-risk; yet about 50% of KERA funding ($15,225,360) was based on the number of at-risk children (see Table I.2). The 4,668 children with disabilities--the remaining 41% of eligible children --generate 43% of the KERA Preschool funds ($13,043,141). Approximately 8% of KERA Preschool allocations were for start-up. The transportation allocation--included in each at-risk and disabled allocation--is based on the number of students receiving transportation--163 preschool programs provided transportation with KERA Preschool funds.

Table I.2

Program Type Eligibility and Allocation Amount for Children in KERA Preschool Programs

Program Type Eligibility	Number	%	Dollars	%
Four-year-olds At-risk	6,816	59.35	15,225,360	49.6
Disabled[a]				
Speech	2,591	22.56	6,091,441	19.8
Developmental Delayed	1,752	15.26	5,343,600	17.5
Severe	325	2.83	1,608,100	5.2
Start-up[b]			2,428,020	7.9
Total[c]	11,484	100.00	30,696,521	100.0

[a] The 2,418 four-year-olds at-risk and disabled are counted as disabled.
[b] Start-up was allocated for 5,781 children who were added to the KERA Preschool Program in 1991-1992.
[c] The sum of individually reported totals of funds allocated as reported on the mid-year financial reports is $30,659,804. This figure varies by $36,717 from the total derived by summing the individual allocation items.

COST ANALYSIS

Expenditure Categories

For the following discussion, expenditures reported on mid-year financial reports have been aggregated into categories on the basis of object codes used by districts reporting expenditures of state funds.

Support: Community services 1100 series includes welfare activities and expenses for textbooks, shoes, glasses, hearing aids, medical care, and the like for indigent pupils; includes attendance services 300 series to include social worker and others related to enrollment and attendance.

Instructional Salaries: The instruction 200 series includes elementary teachers--Level I and Level II lead teachers, special instructional staff including special education teachers, speech therapists, etc., other instructional teachers/staff including substitute teachers, teacher aides, Level III lead teachers, and instructional aides. Object codes from the 800 series refer to social security contributions and other forms of employee insurance related to instructional salaries.

Instructional Materials: Within the instruction 200 series, object codes 231 through 269 represent equipment, books, periodicals, audio-visual materials, tests, textbooks, teaching supplies, and instructional travel.

Administration: Within the administration 100 series, object codes 111 through 155 consist of those activities that support the affairs of the school district that are system wide.

Health/Social Services: Health services 400 series include services in the field of physical and mental health; salary of nurse, contractual health services, etc.

Transportation: Within the pupil transportation 500 series are employees, contractual services for buses and public conveyance, replacement of equipment, operating costs of gasoline, lubricants, tires, maintenance, insurance, and bus service for field trips.

Other: From operation 600 series and maintenance 700 series

KERA Preschool Expenditures Itemized on Mid-Year Financial Reports

Expenditure of KERA Preschool funds statewide, categorized using the combined object codes discussed above, are summarized in Table I.3. The percentage each expenditure category is of the total is based on the grand total of allocations of KERA Preschool funds to all districts.

Table I.3

Expenditure of KERA Preschool Program Funds by Cost Category
Mid-Year Financial Report Data (n = 167)

Cost Category	Amount Budgeted	Percent of Total
Support	$129,580	0.4%
Instr. Salaries	15,668,814	51.5%
Instr. Materials	10,022,702	33.0%
Administration	451,233	1.5%
Health/Social Serv.	281,271	0.9%
Transportation	3,692,709	12.1%
Other	170,553	0.6%
Total	30,416,862	100.0%

The major expenditures, as determined by share of total KERA Preschool allocation, are instructional salaries, instructional materials, and transportation. Table I.4 provides an overview of the total allocation of $30,416,862 of KERA Preschool funds by program area as reported in mid-year financial reports.

Table I.4

Total Costs of KERA Preschool Programs by Cost Category
Mid-Year Financial Report Data (n = 167)

Cost Category	At-Risk	Disabled	Start-up	Total
Support	56,667	63,426	9,487	129,580
Instr. Salaries	8,872,195	6,629,932	166,687	15,668,814
Instr. Material	3,591,982	4,425,312	2,005,408	10,022,702
Administration	241,829	167,468	41,936	451,233
Health	153,367	115,956	11,948	281,271
Transportation	2,116,607	1,415,808	160,294	3,692,709
Other	111,519	39,448	19,586	170,553
Total	15,144,166	12,857,350	2,415,346	30,416,862

The average cost per child is $2,654.92 with the average allocation by districts to instructional salaries at $1,298.45 per child. An additional average of $972.76 per child is allocated to instructional materials (see Table I.5).

Table I.5

Expenditure Per Child in All Districts
Mid-year Financial Report Data (n=167)

Cost Category	Eligibility Category Risk	Disabled	Start-up	Total per Child
Support	11.71	17.22	1.23	14.84
Instructional Salaries	1,229.47	1,335.82	49.07	1,298.45
Instructional Material	623.80	937.40	310.35	972.76
Administration	22.69	37.65	8.18	36.76
Health	18.02	24.59	2.82	18.42
Transportation	238.93	315.48	26.83	299.18
Other	10.45	17.55	3.82	14.51
Total	2,155.07	2,685.72	402.31	2,654.92

Total per child average allocation to health/social support is $18.42. Records indicate a differential allocation between at-risk and children with disabilities, but in practice, with children with disabilities mainstreamed with at-risk children, the actual differential between at-risk and disabled allocations is identified by comparing health, support, special education teachers, and aides expenditure categories between programs. The average per child allocation to transportation is $299.18 across all districts. For comparison of figures in Table I.5 with KERA Preschool allocations, the 1991-92 KERA Preschool per-child allocation of funds by eligibility category is provided in Table I.6.

These data reflect the allocation of KERA Preschool funds. What seems to have happened is start-up dollars have been used to subsidize transportation costs. Start-up funds were a source of unrestricted dollars. The transportation allocation for 1991-92 was set at $210 per child--excluding severely disabled--to assist in operational costs, particularly bus monitors and special needs. The start-up allocation of $420 per child has been allocated to transportation, instructional materials, and instructional salaries. In general from KERA Preschool funds, it appears that $2,155 per child was allocated to at-risk while the funded amount was $2,235 with transportation and $2,025 without transportation.

The majority of disabled children served are in the speech only designation where $2,351 per child is funded. Since the overall allocation to disabled children was $2,686 it appears that some developmentally delayed or severely disabled are served from KERA funds; also, supplemental funds come from federal dollars and children are referred to public and private agencies for ancillary services. According to the Joint Preschool Proposals, health services were to be provided primarily by public agencies, whereas auditory and developmental support services were to be provided by the districts. Medical support services were provided about equally by private and public providers with only dental care being provided in large part by private services.

Table I.6

1991-92 Preschool Per-Child Allocation

Component	At-Risk	Speech	Dev. Delay	Severe
Instructional	$1,815	1,889	2,420	3,205
Social/Health	210	252	420	693
Sub Total[a]	2,025			
Transportation	210	210	210	1,050
Total	2,235	2,351	3,050	4,948
Start-Up	420	420	420	420

[a] *Sub-total amount reflects at-risk allocation, per pupil, for districts not providing transportation for four-year-olds at-risk*

Allocation of KERA Preschool Funds for Transportation

Tables I.5 and I.6 indicate an $89 difference between allocations and expenditures on transportation for districts. To better understand the components of transportation costs, Table I.7 provides the breakdown of KERA Preschool transportation costs. Within the pupil transportation 500 series, object codes reporting employees, contractual services for buses and public conveyance, replacement of equipment, operating costs of gasoline, lubricants, tires, maintenance, insurance, and bus service for field trips were categories most frequently listed.

Table I.7

Transportation Expenditures from KERA Preschool Allocation of Funds -- Total and Per Child Expenditures by Object Code Categories
Mid-Year Financial Report Data (n = 167)

	Total	%	Per Child
General	89,698	2.43%	8.00
Employees	2,997,049	81.16%	225.41
Contractual	234,355	6.35%	37.09
Equipment	5,854	0.16%	0.79
Operating	363,103	9.83%	27.32
Other	2,650	0.07%	0.57
Total	3,692,709	100.00%	299.18

The largest share of transportation expenditures from KERA funds is for employees--bus drivers and monitors, required by the KERA Preschool Program. Operating expenses are approximately 10% of transportation expenditures. Contractual services, which include buses, are 6% of transportation costs. This reflects an additional bus run at noon to return morning children and pick-up afternoon children.

1991-92 KERA Joint Preschool Proposal Data

The 169 districts, with complete Joint Preschool Proposals filed with the Kentucky Department of Education, are reported here.

Coordination with Other Agencies

Ninety-six districts indicated the district would provide all services for four-year-old children at-risk. Sixty-seven districts indicated plans to coordinate with other agencies for classroom placement services for four-year-olds at-risk. Most districts who contracted did so with only one agency. Overall, 54 Head Start programs, 18 private, and 4 other programs were identified for potential contract or cost share arrangements for four-year-olds at-risk.

Eighty-eight districts planned to provide all services for three- and four-year-old children with disabilities without contracting for placement. Additionally, 78 districts indicated plans to contract or cost share services for three- and four-year-old children with disabilities. Overall, 47 programs planned to contract or cost share with Head Start, 36 with private programs, and 13 with other agencies.

Table I.8 indicates total funds from state and federal sources that were expected to be available to support preschool activities as reported in the Joint Preschool Proposals. Overall, 43% of the anticipated funding for KERA Preschool Programs was expected to come from funds other than KERA monies with the largest portion of additional funding expected from federal Head Start dollars.

Table I.8

Anticipated Funding Sources for District KERA Preschool Programs

Fund Source	Children	Amount	Average per Child
KERA	10,125	$24,466,888	
Fed. Head Start	5,331	9,943,439	
Other (PACE)	1,056	1,541,171	
Local Funds	910	3,407,386	
Federal Disability	3,416	2,821,636	
Chapter 1	210	165,306	
Total[a]	15,970	$42,811,998	$2,842.56

[a] *Total estimated funding for 15,970 children was $42,811,998 with the average cost per child from all sources calculated to be $2,842.56--these figures are not the simple sum and average of children and average per child, respectively, because the total is for nonduplicate children and the average per child is a function of number of the children eligible for each funding source.*

Additionally, related services were planned to be available for children with disabilities provided primarily by districts (n=91) and private services (n=68) with public provision (n=39) least likely. These data are useful here to indicate the number and variety of funding sources available to school districts to supplement KERA Preschool funding--especially for providing services for disabled students.

Costs of KERA Preschool Programs: Districts Compared to Type I Programs

District budgeted amounts and percentages of total expenditures by category from financial reports submitted by the 167 school districts providing services for the KERA Preschool children are the basis for the following comparisons of samples with total district data. Responses from district and Type I budgets inserted in mailed questionnaires were used to compare average cost per child by cost category with mid-year financial report data average cost per child (see Appendix B).

Comparison of district and Type I data in Tables I.9A and I.9B, indicate a greater allocation of KERA dollars to districts than to Type I programs. Dollars to Head Start are represented in both district and Type I budgets. More dollars in Type I federal disability

funds, PACE funds, Chapter I funds, local district funds, and other sources are greater for districts represented here. Tuition, fundraising, and the USDA food programs are revenue for Type Is.

It is important to note that Type I facilities included here cannot be assumed to be comparable programs. In fact, most report not being familiar with KERA Preschool Program requirements. Few are NAEYC accredited; however, this is also true for district programs. Comparisons cannot be made since measures of the quality of the preschool environment and measures of student outcomes and family functioning were not conducted on the Type I programs. KERA Preschool Programs provide support services, health and social services, and special education instruction, in addition to transportation; whereas, Type I facilities not participating in KERA Programs do not allocate funds to these program components.

Caution should be used in generalizing from Tables I.9A and I.9B. These tables contain self-reported data from districts and Type I facilities. Both written and verbal instructions and assistance were provided; however, reporting data by the categories requested in the RFP, i.e. administration, instructional salaries, etc., rather than by object code was problematic. In both cases (district and Type I facilities) revenue does not equal expenditure. In some cases the total of category dollar amounts does not equal either total expenditures or total revenue.

Persons completing the budget page were asked to identify all costs--real and in-kind--and assign a dollar value for in-kind contributions. For districts, expenditures exceed revenue by $920.21 per child. This differential represents the value of in-kind contributions beyond revenue. For the Type I facilities, revenues exceed expenditures by $672; this profit of approximately $700 per child per year is within expected limits. These figures indicate the differences in type and number of support services offered by the two types of programs. District programs indicate a variety of revenue sources consistent with the planned alternative revenues to support at-risk and disabled children. Type I facilities rely primarily on tuition and fundraising for revenue unless they are a Head Start program or qualify for federal disability funds.

Table I.9A

Average of District Budgets Returned with Mailed Questionnaires -- Per Child Costs

	4-YR At Risk KERA	3 & 4 YR Disabled KERA	Head Start	Federal Disability 91-92	USDA Food Program	PACE	Chapter One	Local District Funds	Federal Grants	Other Specify	Total Revenue
Total Revenue	1386.23	967.46	347.90	169.88	0.00	70.46	17.29	233.02	35.23	218.22	2885.24
Administration											
Salaries	34.11	47.00	31.19	12.66	0.00	0.00	0.00	64.40	0.00	0.00	64.65
Supplies	12.53	9.33	2.20	1.73	0.00	0.42	0.00	7.69	0.00	0.00	16.02
Instructional											
Salaries	1272.87	772.77	167.57	117.44	0.00	31.67	5.52	32.05	32.47	0.00	935.36
Supplies	172.02	118.32	59.75	19.28	0.00	5.88	0.00	25.85	0.00	107.24	326.31
Transportation											
Salaries	244.41	123.17	17.84	1.89	0.00	0.00	11.76	150.93	0.00	1.38	168.38
Buses	25.01	42.52	0.00	0.00	0.00	0.00	0.00	40.17	0.00	0.00	20.97
Maintenance	41.58	11.07	7.99	0.00	0.00	0.00	0.00	21.79	0.00	1.45	28.24
Insurance	0.00	0.00	5.28	0.00	0.00	0.00	0.00	5.74	0.00	0.12	2.52
Health											
Health Costs	29.62	31.63	17.35	4.97	0.00	0.00	2.72	1.91	0.00	0.00	33.24
Social Costs	1.72	2.28	7.50	2.26	0.00	0.00	2.26	1.34	0.00	0.00	5.96
Support Service											
Salaries	15.23	74.89	14.34	13.83	0.00	0.00	0.00	2.51	0.00	0.00	45.18
General Operation											
Insurance	4.35	2.06	0.49	0.76	0.00	0.00	0.00	2.05	0.00	0.00	4.58
Rent/Mortgage	10.49	1.89	1.36	0.95	0.00	0.00	0.00	5.67	0.00	0.00	12.70
Maintenance	0.26	6.80	5.17	0.00	0.00	1.51	12.43	11.17	0.00	0.24	30.90
Related Services											
Salaries	31.73	13.79	0.00	10.60	13.83	0.00	0.00	20.35	0.00	146.71	119.00
Parent Education											
Salaries	0.62	0.45	0.00	0.07	0.00	0.00	0.00	0.48	2.76	0.00	8.00
Operating	11.89	9.26	4.24	0.38	0.00	0.67	0.00	0.84	0.00	0.00	19.75
Total Expenditures	1955.90	1021.48	449.74	215.64	13.83	40.13	34.70	268.23	2.76	257.00	3805.45

Table I.9B

Average of Type I Budgets Returned with Mailed Questionnaires -- Per Child Costs

	4-YR At Risk Kera	Head Start	Child's Tuition	USDA Food Program	TCC	CCBG	Church Industry/ Support	SSBG	ARC	Other/ Specify	Total Revenue
Total Revenue	32.73	218.55	994.93	122.78	7.18	158.69	3.10	39.81	7.18	72.31	1728.87
Administration											
Salaries	113.62	26.81	80.98	0.09	0.55	0.55	0.00	0.55	0.55	0.00	279.39
Supplies	2.37	0.82	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.79
Instructional											
Salaries	295.6231	840.4647	105.5748	0	0.2208	0.2208	0	0.2208	0.2208	0	473.2388
Supplies	6.3981	53.7298	40.9135	0	0.0552	0.0552	0	0.0552	0.0552	0	34.0957
Transportation											
Salaries	0.91	389.78	0.00	0.00	0.02	0.02	0.00	0.02	0.02	0.00	2.82
Fuses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.54
Maintenance	0.00	38.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.84
Insurance	0.38	9.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.25
Health											
Health Costs	0.00	47.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Social Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Support Services											
Salaries	10.15	101.45	0.00	28.12	0.00	0.00	0.00	0.00	0.00	0.00	10.15
General Operation											
Insurance	6.98	0.00	9.85	0.00	0.06	0.06	0.00	0.06	0.06	0.00	15.65
Rent/Mortage	22.42	45.45	13.01	0.00	0.06	0.06	0.00	0.06	0.06	0.00	62.75
Maintenance	4.85	19.22	8.72	0.00	0.06	0.06	0.00	0.06	0.06	0.00	34.12
Related Services											
Salaries	17.61	244.77	34.16	0.73	0.06	0.06	0.00	0.06	0.06	0.00	29.60
Parent Education											
Salaries	0.45	35.49	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05
Operating	18.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Expenditures	481.22	1853.36	201.59	28.12	0.00	0.00	0.00	0.00	0.00	0.00	1037.09

From discussions with district personnel and Type I personnel, it seems that the district sites and funded programs use district and supplemental funds to meet costs of providing services. There is an in-kind subsidy represented here when districts run bus services without charging KERA for capital costs of transportation. Insurance, janitors, classroom space, and the like are in-kind contributions or hidden costs often not allowable from KERA funds. A portion of a bus or building, a portion of a lunchroom food service operator, or janitor that is not charged to KERA budgets is a subsidy to KERA district programs, but represent actual services supporting the KERA Preschool Program.

Comparison of figures in Tables I.9A and I.9B indicate average per child total revenue for districts equals $2,885, while, average per child expenditure is $3,805. Type I facilities indicate average revenue equals $1,729, while average total expenditures per child is $1,038. The budget and personnel surveys mailed to Type I facilities and district programs were designed to capture the same types of in-kind contributions and subsidies identified in a report by the U.S. Government Accounting Office (GAO). In a 1989 publication entitled **Early Childhood Education: Information on Costs and Services at High-Quality Centers**, the GAO reported a survey of early childhood education programs accredited by the National Association for the Education of Young Children (NAEYC). The GAO report, which determined the costs of providing high-quality early childhood education, indicates that in 1988, the reported cost per child was $4,070; however, after adjusting for in-kind donations the average cost per child was estimated to be $4,660. Although NAEYC accreditation has not been achieved in many KERA Preschool programs it is an anticipated standard for the future and a factor that needs to be considered in projecting future costs.

Another major GAO finding that can be used as a basis of comparison for KERA funding was the indication that 75% of NAEYC center expenses were for salaries, benefits and rent or mortgage expenses. In the KERA study, the overall budget comparisons also indicate that a large portion of the cost of district programs is instructional salaries. There are, however, notable differences between the GAO study and the KERA study given that 22% of the KERA Preschool programs included here were first year programs with the remaining 78% only in their second year. New programs require an investment in equipment and materials recognized by the start-up allocation to districts to assist in setting

up the program. Therefore, the share of the budget allocated to instructional salaries is less for 1991-1992 than it will likely be in the future. Currently start-up is being used for instructional salaries, instructional materials, and transportation. The absence of start-up money in 1992-1993 and subsequent years will require shifts in the proportion of the budget allocated to salaries and a reassessment of the adequacy of funding. The role and proportion of instructional salaries in the allocation of KERA Preschool funds is discussed in the next section.

Credentials and Salaries of Preschool Teachers

The salaries of preschool teachers by level were reported by the districts in their mid-year financial reports. Table I.10 presents per child instructional salaries from expenditure of KERA Preschool funds. Total per child cost for Level I and Level II instructors is double the per child cost of Level III instructors and aids in the districts. Special education instructors add $85 per pupil to the total per-child cost of instructional salaries. Clearly programming for children with disabilities accounts for the largest portion of special education salaries per child. Additionally, Level III instructors and aids have a larger portion of their salary identified with the disability program.

Table I.10

Instructional Salaries Per Child from KERA Preschool Funds
Mid-year Financial Data (n = 167)

Salaries	At Risk	Disabled	Start-Up	Total
Principals	2.41	2.42	0	2.41
Level I/II	639.68	626.91	13.94	635.51
Special Ed.	39.92	123.78	9.49	85.08
Gen. Inst.	83.30	101.78	6.15	86.49
Level III/ Aides	283.97	317.39	10.31	313.22
Other	180.18	163.54	9.17	175.73
Total	1,229.47	1,335.82	49.07	1,298.45

The following information is based on data reported on personnel sheets returned with mailed questionnaires. District responses to date (June 15, 1992) have been 33 of the 174 districts and Type I responses to date have been 75 of the 340 mailed statewide.
A comparison of the credentials and amount of salary paid in the district and Type I preschool programs in the state follows:

(1) Type I Level I teachers' (n=18) minimum salary is $7,000 while the maximum is $24,000 with a mean of $13,885. District Level I teachers' (n=31) minimum salary is $962 while the maximum is $34,563 with a mean of $22,029.

(2) Type I Level II teachers' (n=5) minimum salary is $10,400 while the maximum is $16,200 with a mean of $13,480. District Level II teachers' (n=3) minimum salary is $20,410 while the maximum is $25,830 with a mean of $23,100.

(3) Type I Level III teachers' (n=54) minimum salary is $0 while the maximum is $18,000 with a mean of $7,765. District Level III teachers' (n=40) minimum salary is $2,540 while the maximum is $36,205 with a mean of $16,828.

In general, district maximum salary per level was higher than for Type I programs. The mean salaries for districts were higher for each level. Minimum salary per credential in Type I facilities was mixed. It was a function of whether the lead teachers were unpaid volunteers or did not receive a salary for their time because they received profits as owners. Comparing data from districts with Type I facilities where some lead teachers appear to be owners makes the salary of a lead teacher appear to be $0.00 (zero) when they actually receive income from profits rather than a reported salary or wage. The personnel sheets returned from districts and Type I mailed questionnaires indicate few Level II employees. District personnel have a greater representation of Level I lead teachers. Type I facilities have a greater representation of Level III lead teachers.

Table I.11 presents the average of lead teacher salaries per child by level for both district and Type I programs which returned mailed questionnaires and personnel inserts. The average Level I lead teacher salary per child is about $1,000 for district programs which is twice that of Type I Level I lead teachers. Type I Level II and Level III lead teacher salaries are greater per child than district lead teacher salaries at Level II and Level III.

Table I.11

*Average of Lead Teacher Salaries per Child by Level for District and Type I Programs Returning Mailed Questionnaire Personnel Inserts**

	Type I	District
Level I	$490.66 n=14	$1,006.79 n=30
Level II	$422.50 n=2	$256.67 n=3
Level III	$344.43 n=50	$211.34 n=40

**No salaries of $0.00 included*

SUMMARY

Data sources for the cost analysis were of two types: 1] district information about KERA Preschool programs, child counts, and dollars and 2] district and Type I facility information about all funding sources and expenditures for preschool programs. The KERA data included 1991-92 KERA Joint Preschool Proposals, Official Count Forms and Mid-Year Financial Reports made available by the Kentucky Department of Education, Early Childhood Division. The data gathered in the project included mailed questionnaires, with personnel and budget sheets, that were sent to districts and Type I facilities. These data were used: 1] to analyze allocation and expenditure of KERA Preschool dollars, 2] to identify and analyze revenues and expenditures from all sources available for preschool programming, and 3] as the basis for comparing revenue and expenditure amounts and patterns between district preschool programs and Type I providers throughout the Commonwealth.

- Official count data indicate 12,540 children participated in KERA Preschool Programs for the 1991-1992 school year--1,056 were non-eligible four-year-olds. Of the 11,484 eligible children, 59% were four-year-olds at-risk--the remaining 41% were disabled

with 2,418 four-year-olds who were both at-risk and disabled counted as disabled.

- Current per child expenditure of $2,655 from KERA Preschool funds is below the figure for NAEYC accredited programs reported in the GAO study. District budgets that include all funding sources and in-kind contributions of districts show a per child expenditure of $3,805--an amount that remains below the 1988 figure for NAEYC accredited programs of $4,660 per child when in-kind contributions are included.

- Districts' preschool program revenue, in addition to KERA Preschool funds, is primarily from federal disability funds and local district funds. District KERA budgets are allocated primarily to instructional salaries, instructional materials, and transportation. Overall, budgets from all sources indicate this same pattern of expenditures. Start-up support has been used by districts to supplement ongoing programming for instructional salaries, instructional materials, and transportation. In the absence of start-up funds for 1992, reallocation of funds within the KERA Preschool Program budgets will result in a greater share of the budget being allocated to instructional salaries and the allocation of KERA dollars for transportation continuing to be less than districts' actual expenditures for transportation.

- No measures of program quality or student outcomes have been conducted with Type I facilities so no comparison of programs between district programs and Type I programs is possible at this time. However, budget information returned by Type I facilities indicate that revenue for Type I facilities is from children's tuition, fund raising, and in some cases, state and federal support. Type I budgets are allocated to instructional salaries, administration, and overhead. Type I facilities have costs for space, insurance, etc; while district programs have school district support for facilities and services already in place for the district.

- Once again, quality comparisons can not be made between district and non-district programs; however, personnel and budget sheets identified two points of additional interest. District programs hire Level I lead teachers; while Type I programs hire Level III lead teachers and aides. District and Head Start or private programs that are cost shared most often reported that one program was providing transportation and the other providing health/social services.

This section, Part I of the study, has focused on the cost of delivering programs to four-year-olds at-risk and disabled three- and four-year-olds. Information provided should assist decision makers in determining whether the funding amounts and methods associated with the programs are sufficient and appropriate regarding allocation of KERA Preschool funds within and across programs and in combination with other funding sources. Additionally, these data provide information regarding the costs of program components and the nature of future cost factors affecting the program. Benefits of KERA Preschool Programming for four-year-olds at-risk and disabled three- and four-year-olds are measured by student outcomes, reported in Part II, and programmatic components, reported in Part III.

EVALUATION AREA PART II: STUDENT OUTCOMES

PURPOSE OF EVALUATION AREA II

Policy makers, educators, parents and the general public are concerned about the efficacy of the KERA Preschool Program. They want to know whether or not it is accomplishing the major goal of the program; that is, will the children who participate in the program be more successful in school and in life. Thus, the purposes of Evaluation Area II were first to assess short term student progress for the 1991-92 school year in terms of children's attainment of developmental milestones and second to identify other effects of participation in the Preschool Program. Only a longitudinal study will enable us to answer the longer term question of success on other life indices.

DATA COLLECTION PROCEDURES

To accomplish these purposes, data were collected on a stratified random sample of the children who were participating in the Preschool Program on three types of measures: tests of the children's developmental skills, teachers' evaluations of the children's social skills development, and parents' self-reports on two instruments designed to assess child rearing attitudes and family functioning.

Before we looked specifically at the children who were identified for participation in the study, it was necessary to describe the total population of children participating in the Preschool Program throughout the state.

TOTAL POPULATION SERVED IN THE 1991-1992 PRESCHOOL PROGRAM

During the 1991-1992 school year, approximately 12,540 children were served by KERA Preschool Programs (see Table II.1) Of the total number of children served, 6816 were identified as at-risk and 4668 children had disabilities. Of the 4668 children with disabilities, 2418 were also identified as at-risk. Of the children with disabilities, 3295 were four-year-olds and 1380 were three-year-olds. Approximately 56% of all the children with disabilities were identified as having only speech problems; whereas 38% were identified as

developmentally delayed, and 7% had severe disabilities. If districts had openings in their programs after admitting all of the eligible children who were identified as at-risk or disabled or if they chose to provide district funding, they were allowed to serve other children. Consequently, 1056 noneligible children also participated in the four-year-old programs.

Table II.1

Children Served in KERA Preschool Programs During the 1991-1992 School Year.

Student Type	Number
At-risk	6,816
Developmental Delay	1,752
Speech Only	2,591
Severe	325
Total Eligible Children	11,484
Noneligible Children	1,056
Total	12,540

For the children with disabilities, 93 districts reported that they provided the necessary related services themselves; whereas 108 of the districts contracted with public or private agencies to provide related services. These two figures combined are greater than the total number of districts in the state (176) because some districts provided some of the necessary related services while contracting out for other services.

Identifying the Sample

For the purposes of identifying the three- and four-year-old children who would be tested, the preschool coordinator in each of the identified districts was notified that their district had been randomly selected to participate in the evaluation. Two sites within each district were identified by the preschool coordinator, and the preschool coordinator in collaboration with the teachers identified potential testing times. Project staff asked that the teacher have a list of children without disabilities and list of children with disabilities

available to the testers. Nonconsent forms were sent to all parents on which they could indicate if they did not wish their children to participate. The testers then randomly selected the appropriate number of children from each list. If a parent of a selected child had returned the nonconsent form, then that child did not participate in the study and a different child was selected.

Categories of Children. The total number of three- and four-year-old children identified and tested was 432. This number included 307 children identified as at-risk and 92 children identified with disabilities. Thirty-two additional children were identified and tested but no student type was indicated for them on the test protocols. Of the 92 children with disabilities, 66% (n=61) were identified as only having speech difficulties, 29% (n=28) were identified as developmentally delayed, and 3% (n=3) were identified as having severe disabilities (see Table II.2.). We believe that this constitutes a representative sample of the children in the Preschool Program as the proportion of children in each category is roughly equivalent to the total population of children being served statewide, although there is a somewhat higher percentage of "speech only" children in the sample and a slightly lower percentage of children with developmental delays and severe disabilities than in the total population of children being served statewide.

Table II.2

Student Type by Number of Children Tested

Student Type	Number of Students
At-risk	307
Developmental Delay	28
Speech/Language Only	61
Severe	3
Student Type Not Identified	32
Total	432

Type of Program. Further analyses of the three- and four-year-old children in the sample indicates that 72% (n = 310) of the children tested were being served in district provided programs. An additional 14% (n = 59) were being served through Head Start. Of the total number of children tested, 8% (n = 34) were receiving some services that were contracted through providers other than the public schools or Head Start. Table II.3 provides a summary of the types of programs in which children with and without disabilities were being served.

Table II.3

Type of Program by Student Type

Type of Program	All 3 and 4	At Risk	Speech Only	Other
District Only	310	221	45	22
Head Start	59	46	8	5
Some Services Contracted	34	22	5	1
Program Type Not Identified	28	18	3	3

Race and Gender. There were 213 males and 214 females tested. In terms of race, 352 of the children tested were white, whereas 46 were African American. Four children belonged to other ethnic groups. The discrepancy between the total number of children tested and the number of children reported by race and gender is due to missing data on test protocols.

Identifying a Control Group

It had originally been our intention to identify for comparison purposes a control group of children who were eligible but not enrolled in the KERA Preschool Programs. Unfortunately, only nine such children could be located even though we contacted Head Start programs and KERA Preschool Programs to ascertain whether there were children who had been identified but not served. They were unable to provide us with any names of potential children for this control group. We proceeded to contact other social service agencies, but

they, too, were unable to provide the names of any potential children for the control group. The timeline of this project did not allow adequate time for pursuing the only other options for locating control children; that is, to visit waiting rooms of public health clinics and go door-to-door in housing projects. We have presented the data from our study of these nine children; however, we believe that the number of children is too small to enable any valid comparisons.

ASSESSING DEVELOPMENTAL LEVELS

The children selected for the sample were given the Battelle Developmental Screening Instrument which is a subcomponent of the Battelle Developmental Inventory (BDI). A copy of the Battelle Screening Instrument is provided in Appendix C. The Battelle Screening Instrument consists of 96 items that are grouped into five domains: cognition, communication, adaptive, motor, and personal-social. Procedures involve direct testing of the child, interviews with caregivers, and observations of the child. The administration time is 30 to 40 minutes. The instrument has adaptations for children with disabilities such as motor, visual, speech, or hearing impairment, emotional disturbance, and multiple disabilities.

Results of the Battelle Developmental Screening Test. The results of the Battelle for the 432 three- and four-year-old children with and without disabilities and for the nine control children are displayed in Table II.4. Any comparisons between the two groups must be viewed with caution because of the low number of children in the control group.

The data reported in Table II.4 represent the number of children in each category who passed the screening and those who did not. The cutoff score used was one standard deviation below the mean. Thus, children who failed the Battelle Screening are considered to be at least one standard deviation below the mean when compared with other children of their same chronological age.

Table II.4

Battelle Scores on All Three- and Four-year-olds

Battelle Domain	All 3 and 4	At-Risk	Speech Only	Other	Control
Personal/Social					
Pass	292	212	42	13	6
Fail	140	95	19	18	3
Adaptive					
Pass	258	196	33	10	5
Fail	174	111	28	21	4
Gross Motor					
Pass	162	131	14	4	7
Fail	270	176	47	27	2
Fine Motor					
Pass	121	98	8	2	5
Fail	310	208	53	29	4
Total Motor					
Pass	123	97	11	3	7
Fail	308	210	49	28	2
Express Comm					
Pass	151	122	14	3	3
Fail	281	185	47	28	6
Recep Comm					
Pass	242	185	30	9	5
Fail	190	122	31	22	4
Total Comm					
Pass	202	160	21	5	6
Fail	229	146	40	26	3
Cognitive					
Pass	233	177	30	8	5
Fail	199	130	31	23	4
TOTAL					
Pass	190	146	22	5	6
Fail	241	160	39	26	3

For the total group of three- and four-year-old children, fewer than 50% of the children passed in five of the domains (Gross Motor, Fine Motor, Total Motor, Expressive Communication, and Total Communication) as well as the total instrument. The domains in which more than 50% of the children passed were Personal/Social, Receptive Language, Cognitive, and Adaptive. The same general pattern was observed for the children identified as at-risk only and for the "speech only" children. The results for the children with disabilities other than "speech only" were dramatically different. No domain was passed by more than 50% of the children with disabilities. As was generally true with all of the children in the sample, the best performance of the children with disabilities was in the Personal/Social domain. This finding is consistent with teachers' observations that the KERA Preschool Program has been most beneficial in the facilitation of social skills.

The results for the small control group of nine children were quite different. The control children who were identified but did not attend the KERA Preschool Program consistently outscored the sample of children who did attend the KERA Preschool. More than 50% of the control children passed each of the domains on the Battelle. As previously stated, it is not possible to make valid comparisons between the two groups because of the limited number of children in the control group. One factor that could contribute to the differences between the two groups is that none of the control children had disabilities. It is also possible that the reason their parents did not enroll them in the KERA Preschool Program is that the parents did not view these children as being at-risk and in need of the program. A larger group of controls must be identified before definitive conclusions can be drawn.

An additional caution about interpreting the data from the Battelle is that the instrument is a screening instrument and tends to overrefer children. Additionally, the range of skill required to pass two consecutive items is often quite broad. Therefore, it would tend to underestimate differences between children. The results should be viewed as preliminary and should be the basis for future investigation into the long term benefits of the program.

Unfortunately, because we do not have any pretest scores on the Battelle for these children, it is not possible to assess any progress they have made since they entered the KERA Preschool Program in August. These scores will be useful, however, as a baseline in future follow-up studies.

TEACHER ASSESSMENT OF SOCIAL SKILLS

Additionally, teachers were asked to use the Social Skills Questionnaire (SSQ) to observe and record the children's social behaviors and adaptive functioning relative to academic performance. A copy of the Social Skills Questionnaire is provided in Appendix C. The teachers of all children tested were asked to complete the SSQ on each child tested. SSQ data were not available for control children because they were not in programs and thus, there was not a teacher to complete the questionnaire. The results of the SSQ are reported in Table II.5.

Table II.5

Social Skills Questionnaire Data on Three- and Four-year-olds by Student Type

Level	All 3 and 4	At-Risk	Speech	Other
Social				
Below	43	22	9	9
Average	305	216	45	18
Above	75	64	5	3
Total	423	312	59	30

The data reported are the results of the total measure of social skills according to whether the children's social skills are judged to be average compared to those of their age peers or whether they are below or above. For all of the three- and four-year-olds combined, 90% (380) of them scored average or better. For the children identified as at-risk, 93% (280) of them scored average or better. Eighty-five percent (50) of the "speech only" children and 70% (21) of the children with disabilities scored above average. Although these percentages are lower than the percentage of at-risk children who scored above average, it is impressive that overall 90% of the children in the program scored average or better on the Social Skills Questionnaire.

ASSESSMENT OF FAMILY VARIABLES

Finally, parents of the children participating in the study were asked to complete two instruments designed to assess family functioning and child rearing attitudes: a modified version of the Child Rearing Attitude Survey (CRAS) and the Beavers Self-Report Family Inventory. Copies of these instrument are provided in Appendix D. The descriptions and results of these measures are reported in Part III of the evaluation.

EVALUATION OF KINDERGARTEN CHILDREN WHO HAD AND HAD NOT ATTENDED KERA PRESCHOOL PROGRAMS IN 1990-1991

In order to provide additional measures of the effectiveness of the KERA Preschool Program, the Battelle Developmental Screening Instrument and the Social Skills Questionnaire were administered to two groups of kindergarten children: one group of children had attended KERA preschools in 1990-1991 and the second group had not. It is important to note that there was no information gathered on the children who had not attended the KERA preschool as to whether they had attended another preschool or remained at home with a parent or with another private caregiver. It is likely that few, if any, of these children had qualified for the KERA program and thus they were more apt to be from more advantaged homes than the at-risk children in the KERA program. A total of 171 children were tested. Of these children, 121 had attended KERA Preschool Programs and 50 had not. Of the 171 children tested, 118 did not have disabilities; whereas 53 did have disabilities. Of the 53 children with disabilities, 57% (30) of the children were identified as only having a speech or language delay.

Results of the Battelle Developmental Screening Instrument

Table II.6 presents the results of t-tests conducted on the mean raw scores of the children in each of the domains and for the entire Battelle Screening Instrument. Significant differences between the means are indicated by an asterisk next to the mean that was significantly greater. Although the raw scores of the KERA participants were higher in eight of the ten areas, there were only three significant differences between the two groups of children and all were in favor of the children who had attended the KERA Preschool

Programs. These differences occurred in the Adaptive Domain, the Communication Domain, and on the Total Score of the instrument.

Table II.6

Comparison of Battelle Scores of Kindergarten Children Who Did and Did Not Attend KERA Preschool Programs During the 1990-1991 School Year.

Domain on Battelle	Fives with KERA	Fives without KERA
Personal/Social	35.31	34.02
Adaptive	33.40*	31.82
Gross Motor	14.73	15.24
Fine Motor	18.37	18.10
Total Motor	33.16	33.34
Receptive Communication	14.05	13.32
Expressive Communication	13.93	13.16
Total Communication	27.98*	26.22
Cognitive	29.13	28.22
TOTAL	158.35*	152.28

Note: An asterisk indicates a statistically significant difference between the two groups of children.

The significance of this finding is strengthened by the same characteristic that was mentioned as a potential factor in the low scores for the three- and four-year olds who are currently in the program. That is, the instrument tends to underestimate differences. Thus, it is more likely that the differences observed in the kindergarten children are true differences and indicates the positive effects of participation in KERA Preschool Programs on children's developmental skills, especially in the Adaptive and Communication Domains and in overall development. This is encouraging since the nonKERA children were more apt to have been from higher income families and thus less apt to be at-risk of school failure. If the KERA Preschool experience was able to overcome some of the disadvantages of the children who are at-risk or have disabilities then the program can be judged to be attaining its goals.

Results of the Social Skills Questionnaire

The teachers of the kindergarten children were also asked to rate the children on the same Social Skills Questionnaire (SSQ) used with the three- and four-year-old children. Table II.7 displays the results of the t-tests that were conducted on the means of the two groups of kindergarten children on each of the five summary measures of the SSQ.

Table II.7

Comparison of Kindergarten Children Who Did and Did Not Attend the KERA Preschool Programs During the 1990-1991 School Year

Item on SSQ	Fives with KERA	Fives without KERA
Cooperation Sum	13.80	15.98
Assertion Sum	11.63	15.46*
Self Control Sum	13.07	16.92*
Social Skills Total	38.32	40.29
Problem Behavior Total	5.27	6.88

Note: An asterisk indicates a statistically significant difference between the two groups of children.

There were two significant differences between the two groups of children, both of which favored the children who had not attended KERA Preschool Programs. The nonKERA children scored significantly higher in the areas of Assertion and Self-control. This was a surprising finding in view of the teachers' perceptions of enhanced social skills in the three- and four-year-old participants in the 1991-1992 KERA program. One possible explanation is that the nonKERA children may have attended a preschool other than the KERA Preschool Program which could potentially account for some of their social skills development. Another possible explanation is that the group of children who did not attend KERA Preschool were children who did not need the extra help to begin with and who came from more advantaged home situations. This question warrants further study.

SUMMARY AND CONCLUSIONS

Participation in KERA Preschool Programs appears to be advantageous for the three- and four-year-olds who were enrolled in the program in 1991-1992 as well as the for the kindergartners who had participated in 1990-1991.

1. Although a large number of three- and four-year-olds who were served in 1991-1992 did not pass the overall Battelle Developmental Screening Instrument, many of them passed the Personal/Social and Adaptive Domains. Since no pretest scores were available for the children, it was impossible to judge the progress they had made since the beginning of the program.

2. Teachers of the 1991-1992 participants ranked 90% of the children as average or better on the Social Skills Questionnaire.

3. Kindergartners who had participated in KERA Preschool Programs scored significantly better in overall development on the Battelle Developmental Screening Instrument and on the two domains of Adaptive and Total Communication as compared to kindergartners who had not been in the program.

EVALUATION AREA PART III: PROGRAMMATIC COMPONENTS

GOALS OF PROGRAMMATIC COMPONENTS EVALUATION AREA

The goal of this evaluation area was to describe and evaluate the manner in which districts have implemented the various components of the Preschool Program. The quality of classroom learning environments, the effectiveness of collaboration between district programs and existing early childhood programs, family functioning, child rearing attitudes, and the degree of parent involvement were of particular interest.

DATA COLLECTION PROCEDURES

Major sources of data included implementation questionnaires for the 176 school districts, implementation questionnaires with budget and personnel pages for 340 Type I licensed child care facilities, observations of a representative sample of preschool classrooms employing the Early Childhood Environment Rating Scale (ECERS), and focus groups with key stakeholders (teachers, parents, administrators, and community agency representatives).

The sampling strategy for participating school districts was the same strategy described earlier based upon geographic regions and levels of economic development as reflected in Figure 1. Consideration was given to the two basic program types supported by KERA as both district and contracted programs were sampled.

Implementation Questionnaires

District Implementation Questionnaires. An implementation survey was mailed to each of the 176 school districts including a budget and personnel page and a cover letter explaining the questionnaire. Approximately one month after the first mailing from the project office, another copy of the questionnaire was mailed from the KDE Division of Early Childhood office. Thirty-three of the 176 school districts returned the implementation survey.

Type I Child Care Facilities Questionnaire. A list of the 1800 licensed child day care facilities was obtained from the Department of Social Services in the Cabinet for Human

Resources. From this listing 340 Type I licensed child day care facilities were randomly selected to receive an questionnaire. A Type I child day care facility is any facility other than a dwelling unit which regularly receives four (4) or more children for day care. Type II licensed child day care facilities were excluded as they serve a small number of children (4-12), are located in family homes, and are less likely to have collaboration arrangements with school districts.

An questionnaire was mailed to each of the randomly selected Type I licensed child day care facilities. Approximately two weeks after the questionnaires had been mailed, a reminder/thank you postcard was mailed to the 340 Type I licensed child day care facilities. Seventy-five (75) of the 340 facilities responded to the questionnaire. The counties from which Type I questionnaires were returned can be located in Appendix E or on the Kentucky map, Figure 2 on page 6.

Curriculum. Both districts and Type I facilities were asked to describe their curriculum. Their responses are summarized in Table III.1. Approximately two-thirds of the districts and three-fourths of the Type I facilities reported that their curriculum could be labeled Developmentally Appropriate Practices. About half of the districts reported that they employed aspects of the High Scope curriculum; whereas one-third labeled their program as Chapel Hill. A smaller percentage of the Type I facilities employed High Scope and Chapel Hill practices, whereas four were Montessori programs, and 12 were categorized as other.

Table III.1

District and Type I Program Description: Curriculum Type

	District (N=33)	Type I (N=75)
High Scope	18 (55%)	8 (11%)
Chapel Hill	9 (27%)	3 (4%)
Developmentally Appropriate Practice	22 (67%)	57 (76%)
Montessori	0 (0%)	4 (5%)
Other	1 (3%)	12 (16%)

Note: More than one curriculum type could be identified by individual program.

It is important to note that these categories are not mutually exclusive and that aspects of the High Scope, Chapel Hill, and Montesorri curricula would employ developmentally appropriate practices. It appears, however, that the majority of both district and Type I facilities are designing their own curricula that they believe to be developmentally appropriate rather than adopting a "canned" curriculum previously developed elsewhere.

It is interesting to compare these data from the 33 districts and 75 Type I facilities with that reported earlier by the 169 districts who returned their Joint Preschool Program Proposals. When the 169 districts were asked to report their curriculum philosophy for the KERA Preschool, they reported the curricular type displayed in Table III.2

Table III.2

Curriculum Philosophy of KERA Preschool Programs

Curriculum	Number of Districts
High Scope	118
Bank Street	6
Motessori	13
Ferguson-Florissant	30
Chapel Hill	67
Other	112

Again numerous districts indicate that they are using aspects of High Scope and Chapel Hill curricula. About two-thirds report that they are using other approaches. Because Developmentally Appropriate Practices was not provided an option, we assume that many of the "other" would be identified as Developmentally Appropriate Practices.

In an effort to look at quality of programming beyond minimal licensing standards, Type I facilities were asked about voluntary participation in programs which have additional standards. Three of the Type I facilities reported that they are accredited by the National Association for the Education of Young Children; whereas, 9 districts reported that they have classrooms that are in the process of applying for accreditation by NAEYC. Thirty-one are approved vendors of the Kentucky Department of Education, and 39 participate in the USDA Food Programs.

Sixty of the Type I facilities and 22 of the districts reported that they are members of their local Preschool Interagency Planning Council (PIPC). PIPC's are composed of representatives from agencies in the community that serve preschool children with and without disabilities. The purpose of these councils is to facilitate collaboration among service providers in order to provide comprehensive, seamless services to children and families. And finally, seventeen of the reporting districts said that they employ the Early Childhood Environmental Rating Scale (ECERS) to evaluate the quality of the learning environment in their early childhood classrooms.

Districts were also asked to indicate the organization of their programs in terms of number of sessions they ran and the number of days per week they operated. The data for the 33 districts is reported in Table III.3

Table III.3

Instructional Program Types

4 DAYS PER WEEK			
	3-year-olds	4-year-olds	3- & 4-year olds combined
Single Session	2	8	12
Double Session	2	5	6
5 DAYS PER WEEK			
	3-year-olds	4-year-olds	3- & 4-year olds combined
Single Session	1	2	4
Double Session	1	2	3
LOCALLY DESIGNED			
	3-year-olds	4-year-olds	3- & 4-year olds combined
	4	3	3

***Note:** Locally designed program types refer to programs that are designed by a specific district and that differ from the standard program types listed above. One example of a locally designed option is a full day program.*

The Joint Preschool Program Proposals submitted earlier by the 169 districts, indicated that the majority (125) of districts are operating on a four-day basis with about equal numbers of districts running single and double sessions. Fewer than a third are running five-day sessions or using another locally designed option.

Table III.4

Instructional Program Type

Program Type	Number of Districts
Four Day	
Single Session	48
Double Session	58
Single and Double Session	19
Five Day	
Single Session	17
Double Session	1
Locally Designed Option	26

SUPPORT SERVICES

In the Joint Program Proposal, districts were asked to identify if they would be providing support services to children and families themselves, or if they would be coordinating with public and/or private medical and social service agencies. Table III.5 indicates that districts planned to use existing medical and social service programs to provide many of the support services. Results from the implementation survey (Table III.5) also indicate that districts are using existing programs to provide support services. These data are preliminary, interesting, and self-reported. More indepth study is needed before conclusions can be reached.

Table III.5

District Planning and Implementation of Support Services

Service	Proposal n=169			Implementation n=33		
	DISTRICT	PUBLIC	PRIVATE	DISTRICT	PUBLIC	PRIVATE
Health Screening	40	132	30	14	15	4
Vision Screening	88	67	41	20	7	3
Auditory Screening	102	76	32	21	7	1
Developmental Screening	137	48	27	22	3	3
Medical Services	26	95	90	10	12	11
Dental Services	19	43	117	8	12	11
Child Day Care	26	27	76	5	7	14
Adult Ed.	107	80	20	16	9	1
Income Assist.	18	153	5	1	18	0
Related Services	67	43	40			
Speech				26	1	2
OT				13	1	4
PT				15	1	4
Other	14	17	13			

Note: Specific services of Speech, Occupational Therapy and Physical Therapy were only collected on implementation survey.

COLLABORATIVE PLANNING FOR THE KERA PRESCHOOL PROGRAM

The framers of KERA were concerned about duplication of efforts in early childhood education and asked that local districts collaborate with other providers of early childhood education in order to avoid such duplication and to avoid the supplanting of federal Head Start funds. Both district and Type I licensed child care facilities were asked to respond to this issue in the implementation questionnaires. Stakeholders were also asked to address this question in the focus groups.

Fifty-one of the 75 responding Type I facilities were located in a school district that provides a KERA Preschool Program and 25 of these facilities are located less than a mile from the school district's KERA Preschool Program.

None of the 33 districts completing the implementation survey reported that they felt that they had duplicated or supplanted existing services. However, the Type I facilities reported on their questionnaires that they felt there had been duplication and supplanting of services. They believed that duplication or supplanting occurred in the following ways:

Children eligible for Head Start were recruited by KERA, thus HeadStart had to enroll more 3-year-olds;

KERA programs are duplicating the same learning skills programs that are provided in many day care programs;

KERA programs are duplicating half-day preschool programs that exist in the community.

Nineteen Type I facilities reported that they felt they had a drop in enrollment due to the implementation of the KERA Preschool Program. On the other hand, six Type I facilities reported that they had gained children as a result of the implementation of the KERA Preschool Program.

Thirty-one of the Type I facilities reported that they were involved with the districts in some way as KERA Preschool Programs were planned. Of those 31, 11 said that they initiated a contact with the district; whereas, 20 facilities said that the school district made the contact. Twenty-six reported that no contact was made by either party.

When Type I facilities reported that they had contact with school district personnel, 8 said that they had worked with the superintendent, 3 with principals, 1 with school board members, 6 with instructional supervisors, 18 with preschool coordinators, 5 with teachers, and 3 with secretaries.

Fourteen of the Type I facilities reported that they had been involved in the development of the local school district's preschool program proposal and 43 said that they had not been involved. Type I early childhood providers reported that they were involved in the following ways:

Eight were involved in planning committees;

Ten were called for enrollment information;

Six were visited for program information;

Four had contracted with the school district to provide all KERA Preschool services;

Seven had contracted with the school district to provide partial services for the KERA Preschool Program;

Eight had shared waiting lists of potential children and families;

Nine jointly recruited children and families.

Twenty-six of the school districts reported on their implementation survey that they involved preschool programs operating in the community in the development of their preschool program proposal; whereas, two districts reported that they did not. Of the districts who responded that they did involve community programs in the planning, they said they did so in the following ways:

Sixteen involved them on planning committees;

Twenty-one called for enrollment information;

Thirteen visited other programs for information about their programs;

Three contracted to provide all services;

Eight contracted to provide partial services;

Sixteen shared waiting lists of potential children and families;

Eighteen recruited children and families together.

Twelve of the 75 Type I facilities reported having an agreement with a school district to provide KERA Preschool Programs. Ten of these programs have contracted to provide partial services, and four have contracted to provide services to children with disabilities.

EFFECT OF THE KERA PRESCHOOL PROGRAM ON SERVICES TO YOUNG CHILDREN AND THEIR FAMILIES

Of the programs who completed this section of the questionnaire, 19 of the 75 Type I facilities and 29 of the 33 school districts reported that they felt that the planning and implementation of the KERA Preschool Program improved services to young children and their families. Eight of the Type I facilities reported that planning and implementation had not improved services to children and families in the district. In general, it appears that the

districts feel more positively about the effects of KERA Preschool Programs on services to young children and their families than do the Type I providers.

Some of the ways in which school districts and Type I facilities believed that services had improved are as follows:

Provision of early childhood intervention for children with disabilities;

Provision of programs for low income families;

Increased knowledge of all agencies and institutions providing child and family services and awareness of what services are actually available in the community;

Service to more children and to their "whole" family;

Provision of services to children who are above the Head Start eligibility guidelines, but cannot afford preschool programs on their own;

Availability of comprehensive screening for more children;

Increased awareness of the benefits of early childhood education;

Increased parental participation in children's education;

Greater coordination and improvement of services;

Increased availability of training for parents and teachers/staff;

Easier transition to kindergarten for the children;

Parental learning of new parenting skills.

In addition, 15 of the 75 Type I facilities and 29 of the 33 districts reported that the planning and implementation of the KERA Preschool Program improved collaboration and working together of agencies and programs in their school district. Some specific improvements were:

Better targeting of at-risk children;

Better communication among agencies and programs for young people and families;

Development of Preschool Interagency Planning Councils (PIPC);

Better awareness of what services are available in the community;

Greater sharing of services and information;

Better transitioning of children into formal schooling.

On the other hand, 12 of the 75 Type I facilities reported that the KERA Preschool Program had not improved collaboration and cooperation among agencies in their district. They cited the following problems:

The school systems want to do it all;

Day care centers and schools are competing for the same money;

Failure to ask day care operators for options;

Failure to provide parents with adequate information.

Of the 75 Type I facilities, 31 were aware that the KERA Preschool Programs have specific program standards and 28 believe that their program meets those standards. Forty-five facilities reported that they would change their program to meet the standards if they had the opportunity to contract with their school district.

Overall, it appears that KERA Preschool Programs are viewed more positively by school district personnel than by other early childhood service providers. There is a perception by these providers that the districts in many cases have not attempted to collaborate and cooperate, but that they are attempting to supplant existing services. The Type I facilities would like the opportunity to contract with the districts and feel that the districts should make better efforts to cooperate and collaborate. On the other hand, many advantages of KERA Preschool Programs were listed by both district and Type I providers, including earlier identification and intervention for children identified as at-risk and with disabilities, provision of more and improved services to a greater number of children and families, easier transition of children to formal schooling, and more parent education and involvement.

EVALUATION OF THE LEARNING ENVIRONMENT IN KERA CLASSROOMS

To assess the quality of the learning environments in KERA preschool classrooms, the Early Childhood Environment Rating Scale (ECERS) was used. The ECERS involves structured observation and evaluation of the early childhood classroom in seven major areas: Personal Care, Furnishings, Language/Reasoning, Fine/Gross Motor, Creative, Social Development, and Adults (See Appendix F.).

Each of the preschool coordinators in the 36 sampled districts was contacted and asked to select one of the two classrooms from which child outcome data had been collected for Part II of this evaluation. The preschool coordinator, the teacher, and a project staff person arranged an acceptable time for the ECERS observation to occur. Eventually, 35 classrooms were observed as one district was unable to arrange for an evaluation.

Teachers in the Sample. Thirty-one of the thirty-five teachers whose classrooms were observed met Level I criteria in that they possessed baccalaureate or higher degrees in child development, early childhood education, early childhood or primary grade special education, or kindergarten certification. More specifically, two teachers had early childhood special education degrees, one teacher had an early childhood education degree, twelve had early elementary degrees (K-4), twelve had elementary degrees with kindergarten endorsement (1-8), four had special education certificates (K-12).

There were no Level II teachers and four teachers met Level III criteria. One of these teachers had an associate of arts degree in early childhood and three had a high-school diploma with a minimum of one year of early childhood experience.

The results of the observations in these teachers' classrooms are presented in Table III.6 which displays the means for all the classrooms in all of the areas observed. The scores on the Early Childhood Environment Rating Scale range from 1 to 7 in each aspect of the learning environment with 1 as inadequate, 3 as minimal, 5 as good, and 7 as excellent. Due to the large number of teachers in Level I, no teachers in Level II, and only four teachers in Level III, it was deemed inappropriate to conduct statistical analyses of differences between the means of the Level I and Level II teachers.

Table III.6

Results of the Early Childhood Environmental Rating Scale

	ECERS Total Points Available	ECERS Means All Teachers n=35	ECERS Means Level I Teachers n=31	ECERS Means Level III Teachers n=4
Greeting	7	4.7	4.7	5.0
Meals	7	3.9	3.9	3.6
Toileting	7	4.4	4.4	4.6
Personal Grooming	7	3.8	3.7	4.0
Total Personal Care	***28**	**17.2**	**17.06**	**18.66**
Furnishings (Routine)	7	5.5	5.5	5.3
Furnishings (Learning)	7	4.5	4.5	4.6
Furnishings (Relax)	7	4.6	4.6	5.0
Room Arrangement	7	4.8	4.8	5.0
Child Display	7	3.8	3.8	4.3
Total Furnishings/Display	**35**	**23.51**	**23.43**	**24.33**
Understanding Language	7	5.2	5.2	4.6
Using Language	7	5.3	5.4	5.0
Reasoning	7	4.8	4.7	5.3
Informal Language	7	4.8	4.9	4.3
Total Language/Reasoning	**28**	**20.25**	**20.34**	**19.30**
Fine Motor	7	5.0	4.9	5.3
Supervision (FM)	7	4.9	4.9	5.3
Gross Motor (Space)	7	4.3	4.2	5.0
Gross Motor Equipment	7	3.8	3.8	4.3
Gross Motor Time	7	5.0	5.0	5.3
Supervision (GM)	7	5.2	5.2	5.3
Total Fine/Gross Motor	**42**	**28.62**	**28.43**	**30.66**
Art	7	3.9	3.9	4.3
Music/Movement	7	4.8	4.7	5.3
Blocks	7	4.5	4.5	4.3
Sand/Water	7	4.0	4.0	4.0
Dramatic Play	7	3.7	3.7	3.6
Schedule (Creative)	7	4.6	4.5	5.3
Supervision (Creative)	7	5.3	5.3	5.6
Total Creative	**49**	**31.08**	**30.93**	**32.66**

	ECERS Total Points Available	ECERS Means All Teachers n=35	ECERS Means Level I Teachers n=31	ECERS Means Level III Teachers n=4
Space	7	3.6	3.5	4.0
Free Play	7	4.5	4.5	5.0
Group Time	7	4.1	4.1	4.3
Cultural Awareness	7	2.5	2.5	3.3
Tone	7	5.3	5.3	5.6
Exceptional Provisions	7	3.5	3.5	3.3
Total Social Development	**42**	**23.48**	**23.28**	**25.66**
Adult Personal Area	7	3.9	3.9	4.0
Adult Opportunity	7	4.3	4.2	4.6
Adult Meeting Area	7	4.0	4.0	4.0
Parent Provisions	7	4.8	4.9	4.6
Total Adults	**28**	**17.20**	**17.18**	**17.33**

Note: Scores on the ECERS can range from 1-7 as follows:

1 = Inadequate
3 = Minimal
5 = Good
7 = Excellent

**Note: The ECERS allows 35 total points in the Personal Care Area, since napping is not included in the 4-year-old program, our total is 28, 7 points less.*

Overall the classrooms were at or above the mean in all the areas except cultural awareness. The individual classrooms ranged in quality from minimal to good with the majority being in the 4+ range , approaching good. Some of the more salient observations will be discussed as they relate to the seven major areas of the classroom environment.

Personal Care. Even though scores were above the mean, there were problems observed in some of the classrooms. Meals were often not served family style and were eaten in large, noisy cafeterias where the furniture was not proper size and teachers or cafeteria workers did many of the tasks for the children. Additionally, many of the programs did not have the children brush their teeth after eating. Hand washing in the programs was sometimes neglected or not monitored as closely as it should be. It should be noted that napping was not included and thus a total possible score in Personal Care was 28 rather than 35.

Furnishings/Display. This was an area of strength in most of the classrooms observed as most of rooms contained appropriate furnishings that were arranged to promote both learning and relaxation. The only area of concern was that of Child Display as it was noted that children's original art work was not often evident. Most of the art work was from a teacher's pattern; consequently the children's products were all alike. For example, butterflies that teachers had cut out were painted by the children and hung from the ceiling. Rather than displaying children's original productions, the classrooms contained much teacher-made or commercially available materials pertaining to numbers, letters, colors, and nursery rhymes, etc.

Language/Reasoning. The classrooms were well above the median on all components. Many language materials were available for free choice and supervised use. At least one planned activity daily involved reading books to children, story telling, flannel board stories, or finger plays. Additionally, many scheduled activities, such as free play and group time, allowed for the use of language.

Fine/Gross Motor. Whereas observations revealed the ready availability and adequate supervision of activities, the amount of gross motor equipment available and the safety of the overall playgrounds were scored less well. For example, one playground was an empty fenced grassy area and the playground equipment consisted of balls for the children to play

with. In other playgrounds, the preschool children used the older children's playgrounds with swings and jungle gyms without proper ground cover.

Creative. Most of the aspects of the learning environments were judged adequate for promoting creativity; however, some inadequacies were observed in the art and dramatic play areas. Although art center materials such as scissors, glue, crayons, paints, and paper were available, the major emphasis during art activities was on projects in which the children were to follow a pattern provided by the teacher. The dramatic play areas were primarily related to housekeeping and the props focused mainly on housekeeping roles. Most classrooms had no provisions for dramatic play involving transportation, work or adventure. One classroom did have a camping site set up in addition to the housekeeping area.

Social Development. The overall social emotional tone of the classrooms was positive and children had adequate time for both free play and group time. Space and provisions for exceptional children were adequate but not outstanding. There was not readily available space for children to be alone. The lowest rated aspect in the entire scale appeared in the area of Cultural Awareness. There was little evidence of any activities or materials promoting cultural awareness. For example, there was little evidence of ethnic differences in the dolls, pictures, books, and stories in the classrooms.

Adults Needs. Observations revealed that the teachers in these classrooms do have some space for their things and have good opportunities for professional development. Provisions for parents are also adequate.

THE FAMILY COMPONENT

Parents of the children who were tested in Part II of the evaluation were asked to complete two instruments designed to assess family functioning and child rearing attitudes: a modified version of the Child Rearing Attitude Survey (CRAS) and the Beavers Self-Report Family Inventory (see Appendix D). A 72-item questionnaire consisting of two subscales of the Child Rearing Attitude Survey was used to assess parents' views about rearing and educating young children. To assess other family variables, parents were asked to complete the Beavers Self-Report Family Inventory, a 36-item instrument designed to provide a quantitative index of parents' self-perceptions of family functioning.

Teachers of the children who were tested were asked to send these two instruments home with instructions asking the parents to complete and return the questionnaires to the UK project office in an enclosed self-addressed, stamped envelope. One week later teachers were provided with a follow-up note to be sent home to the parents as a reminder/thank you for completing the survey.

Of the 432 families who received questionnaires, 144 parents returned them to the project office. Females returned 89% of the questionnaires. Seven percent of the questionnaires were returned by African Americans and 93% by whites. Fifty-nine percent of the respondents were married, 9% were single, 11% were separated, 19% were divorced, and 2% were widowed.

Interestingly, 76% of the respondents had a high school diploma or some higher education. Whether this sample is representative of the total population of parents or whether the better educated parents were more apt to return the surveys is not known, although the latter explanation is likely. Seven percent of the respondents had less than a high school education, 17% had some high school, 45% had a high school diploma, 19% had some college, 6% held an associate degree, 4% held a bachelors degree, 3% had some graduate work, and 1% held a graduate degree. Fifty-two percent of the respondents said they received income assistance from the government. Twelve percent reported receiving Social Security and SSI, 52% received AFDC, 11% received unemployment compensation, 6% received disability payments, and 29% received other government assistance. Twenty-four percent of the participants reported a yearly income of less than $5,000; 37% reported incomes from $5,00 to $24,999; 5% reported incomes between $25,000 to 34,999; 6% reported incomes between $35,000 to $44,999; and 6% reported incomes above $45,000 a year.

The composite picture of the parent respondents was a white female with a high school education or better and an income under $25,000. She was slightly more likely to receive government assistance and to be married than not.

Beavers Self-Report Family Inventory

Parent respondents completed the Beavers Self-Report Family Inventory. This standardized 36 item questionnaire measures five dimensions of family functioning: Health/Competence, Conflict, Cohesion, Leadership, and Emotional Expressiveness.

The Health/Competence dimension taps families' happiness, optimism, problem solving and listening skills, family love, adult coalitions without supplanting parent-child coalitions, individuality, and minimal blaming patterns. The Conflict dimension is related to competence, in that healthy scores indicate low levels of unresolved conflict, fighting, blaming, and arguing, with higher levels of problem-solving and acceptance of personal responsibility. The Cohesion dimension involves satisfaction and happiness through togetherness and closeness, versus more distant relationships. The Leadership dimension involves ratings of strong and consistent patterns of directed leadership in the family. Emotional Expressiveness involves feelings and the ease with which warmth and caring are expressed by family members.

It was encouraging to find that on all five dimensions the total group means of families rank in the adequately healthy range. The mean scores are presented in Table III.7 with lower scores representing greater competence. When the families were separated by families with children designated as at-risk and families with children with disabilities, some slight differences were noted, but these differences were not statistically significant.

Table III.7

Beaver's Self-Report Inventory Means

Beaver's Dimensions	All Children's Families	At-Risk Children's Families	Children with Disabilities' Families	Possible Beaver's Scores
Health/Competence	33.75	33.49	35.04	95
Conflict	18.93	18.35	20.42	60
Cohesion	10.43	10.59	10.28	25
Leadership	6.21	6.09	6.57	15
Emotional Expression	7.30	7.43	7.66	25
Total	76.62	75.95	79.97	220

Note 1: Lower scores indicate greater competence
Note 2: There were no significant differences between the means for families of children identified as at-risk are families of children with disabilities.

The families of the respondents appeared most healthy on the Emotional Expressiveness dimension. The families reported having clear boundaries; they said they negotiate but with some reluctance and ambivalence; and they reported experiencing some periods of warmth and sharing interspersed with struggles for control.

Child Rearing Attitude Scale

Parents were also asked to complete the Child Rearing Attitude Scale (CRAS) on which they were asked to list a few of the most important aspects of child rearing. The responses were categorized into four categories: Moral/Social Values, Love/Affection Needs, Self Esteem, and Communication.

Parents listed 155 responses in the Moral/Social Values category, including respect, discipline, honesty, self-control, obedience, good manners, sharing, good hygiene, good behavior, church attendance, being considerate, and being responsible for one's actions.

In the area of Love/Affection, parents listed 78 responses, including showing love, giving and getting hugs, caring, being kind and showing affection.

Parents responded with items related to Self Esteem 66 times. These items included

praise, showing interest in children, teaching self-help skills, being consistent, teaching respect for one's self, giving encouragement, and letting children make mistakes from which they can learn.

Twenty-six of the parents indicated that Communication was an important aspect of child rearing. In the area of Communication, parents listed listening, paying attention, talking with children, and discussing what is right and wrong with children as well as demonstrating to them by actions.

Methods of Punishment. Parents were asked to describe what types of punishment they used. Responses were divided into three categories: Taking Away of Privileges, Physical and Verbal Punishment, and Time Out.

Parents mentioned Taking Away of Privileges 181 times. The privileges that parents removed were watching TV, riding bikes, playing time with friends, playing with a favorite toy. Parents said they also took away allowances, telephone privileges, and outside play time.

Eighty-five parents reported that they used physical and/or verbal punishment. They mentioned spanking, yelling, slapping on hand, and whipping. Some parents reported that physical punishment was used as a last resort.

Time Out was mentioned by parents 88 times. This category included standing in the corner, sitting on a chair, or going to one's room.

In general, the majority of parents said that they used a variety of punishment strategies to achieve desired behaviors.

Preschool Education Strategies. Parents were also asked what they can do to help educate their children during the preschool years. The responses were categorized into: Teaching of Social Skills, Teaching of Cognitive Skills, Reading to Children, and Providing Experiences. Several mentioned such activities as making crafts, doing chores together, and pointing out things in everyday life. Teaching social skills was listed by 18 parents who said they tried to teach the child right from wrong, encouraged good school attendance, encouraged cooperation with teachers, and taught the child to share and to listen.

Overall, the data regarding family functioning was positive, The parents ranked in the adequately healthy range on five dimensions of family functioning; and they were familiar with and reported using several positive child rearing practices.

ATTITUDES OF STAKEHOLDERS: TEACHERS, ADMINISTRATORS, PARENTS, AND COMMUNITY AGENCY REPRESENTATIVES

DATA COLLECTION PROCEDURES FOR FOCUS GROUPS

Twenty-four focus groups were conducted across the state. The focus groups were held in six different regional locations. The sites were Louisville, Lexington, Ashland, Bowling Green, Paducah, and Somerset. In each of the six regional areas, four focus groups were conducted, one each for teachers, parents, administrators, and community agency representatives.

A focus group is a type of interview in which the moderator asks broad, open-ended questions of a group of participants (see Appendix G). As participants share information, the moderator asks clarifying questions, keeps the group on track and tries to make sure all participants have a chance to share their thoughts. In focus group interviews, it is the group, not the individual, that is the unit of analysis. Focus groups offer the opportunity of a large amount of interaction on a topic in a limited period of time.

In order to encourage responses from the focus group participants, an environment that was non-threatening and neutral was important. Therefore, the community college in each regional area was chosen.

The focus groups were held during the week at times that were thought to be most convenient for each specific population. Each focus group lasted 1 1/2 hours. The six focus groups for teachers were held from 4:00 - 5:30 in the afternoon. Parents were invited to participate from 7:00 - 8:30 p.m. Administrator focus groups were conducted from 9:00 - 10:30 in the morning and community agency representative focus groups were held from 1:00 -2:30 p.m.

Potential focus group participants were notified in a variety of ways. Teachers in the 72 KERA Preschool classrooms where children were tested were notified by mail or in some instances notification was hand delivered by testers who were going to visit specific classrooms. In addition each preschool coordinator in the 36 sample districts was mailed information and encouraged to have KERA Preschool teachers attend.

Each parent who had a child selected for testing was sent a notice about the focus

group via their child's teacher. Letters were sent from the KERA Preschool Program office at the University of Kentucky to the teachers in the 72 classrooms asking that she distribute the letters to the appropriate children.

Elementary principals (administrators) were notified of the focus groups in two ways. First, letters were sent to principals in schools in which children were being tested. Additionally, a random sample of 250 principals were sent information about the focus groups.

Lastly, a variety of community agencies were notified by mail. All Head Start directors received a direct mailing. Preschool Interagency Planning Councils were mailed information and asked to share it with their members. The leadership of the Kentucky Association on Children Under Six and the Kentucky Child Care Association received the information for distribution to its membership.

RESULTS OF FOCUS GROUPS

Teachers

In general teachers (n=13) in the 4-year-old KERA Preschool Programs report very positive feelings and thoughts about the program. They report overall gains in children's short term development. Many of the teachers reported anecdotal episodes about the gains made by specific children in the areas of language, social, emotional, physical, and cognitive development. In other cases, teachers cited pre- and post-test data that they had collected in their classroom that demonstrated change, growth, and positive development during the time the children were in their programs.

Teachers expect that the gains the children have made in their programs will continue and not diminish. The most often cited example was the belief that children would make a much smoother transition into kindergarten. KERA Preschool Programs that were located in the elementary school in which the children would be attending kindergarten stated that children will know the routines (how to line up for the bathroom, how to go through the line in the cafeteria, and how to properly ride on the bus). Teachers with children in this program configuration also state that children will know personnel in the building (principal,

cafeteria workers, bus drivers, librarian) thus making them feel more secure. The teachers report that the children will have more time to "learn" and not be "taking time" to become familiar with the new environment when they go to kindergarten.

Teachers in KERA 4-year-old Preschool Programs that were not located in the public school in which the children will be attending kindergarten also felt that the children would make a smoother transition to the "formal" school experience. These teachers report that they have experienced increased cooperation with kindergarten teachers and they feel their children are familiar with the school and teachers and will do well. Teachers in district, contracted, and blended programs expressed great hopes that the children who had participated in their programs would stay in school and have a better life. They strongly believe that the children are benefitting academically, socially, and nutritionally.

Parent involvement/education was also reported as a positive aspect, across program types. Teachers valued the home visit component as a source of information. As a result of this information, they found they could understand the child and her/his family better and were better able to meet their needs. In one specific instance, a home visit revealed the fact that the children were sleeping on the floor. The teacher was able to network through the community, and a church provided beds for the children for Christmas. Several teachers reported that while they found the home visit component valuable, they did not have enough time to conduct the home visits. These teachers reported that their programs operate five days a week and they have either double sessions in preschool or combination preschool/ kindergarten sessions. Consequently home visits must be conducted at night or on weekends for which teachers are not receiving compensation time or wages.

Some teachers report that in their opinion parents feel more comfortable in the school. In many of the programs teachers report that a parent brings and picks up the child each day, allowing for "mini" parent conferences, each day.

Overall teachers also felt that they had enough financial support to conduct the program. They appreciated the materials and equipment in their classrooms. Integration of children with a disability into the regular classroom was also cited as a strength of the KERA Preschool Programs. Teachers also felt that the screening required for early identification of special needs was positive.

The overall negative that was stated across program type was that the KERA Preschool Program was not available to every child. Teachers felt the program would benefit all children and that all children should have the opportunity to attend.

Teachers also reported that there are many jobs to do and that there is not always enough planning time. Teachers in two different focus groups felt that a classroom cap size should be 15 instead of 20.

Teachers in blended or contracted programs reported that they did not feel that the public school teachers, principals, and school board members respected them as equals and did not value the job that they were doing. They said this is made very apparent at the end of every month when they receive their paycheck, and it is perceptively different than that of public school teachers, even though their qualifications may be equal.

Parents

It is interesting to note that not one parent chose to participate in the focus groups. The possible reasons for this are many and varied. Childcare was not provided during the focus groups. The contract did not allow us the resources to provide childcare. Also we were asking parents to come to an environment with which they may not have been familiar, a community college. The fact that we offered a reimbursement for mileage (.22 cents/mile) was not enough of an incentive. Additionally this population of parents, some of them in very rural areas, may not be familiar with participating in research. They may have lacked trust in the whole process, although very few parents returned nonconsent forms stating that their child could not participate in the testing.

Principals

Overall, principals (n=4) also reported satisfaction with the KERA Preschool Program. They stated that the children in the programs were improving in all areas of development. They were especially pleased with the early health screening and the nutritional component of the program. Through this early screening and early programming, they thought that there was earlier diagnosis of children with developmental delays.

The principals also reported that they thought one of the major benefits of the

programs was the acclimation of the children to the school. They liked the fact that the children knew the building, the people, and the rules. The principals were very hopeful about the future and believed that the Preschool Program will have sustaining benefits as the children have better lives and will value education and the educational system.

Principals also thought that the Preschool Program should be available to all children. They felt uncomfortable with having to serve a select group of children and families. The major difficulty principals have with the Preschool Programs are different policies and guidelines from the rest of the school program. Since the Preschool Program is conceptually and operationally different, it causes confusion.

Principals also report that there is some animosity, although small, from teachers of other grades. Teachers in other grades feel that they could do a better job of teaching if they had the seemingly unlimited resources that they see arriving in the Preschool Program. They also could plan better classroom activities if they only had children four days-a-week and only three to four hours a day. Preschool teachers also reported an awareness of these feelings from other teachers, but reported that they were not prevalent, and were honest observations on the part of the other teachers.

Principals reported that they liked the parent component of the Preschool Program but thought that they were in the initial stages of development. They see a need for more variety in the opportunities that the schools provide to parents for involvement in their child's education and school.

Community Agencies

The community agency representatives (n=22) attended the focus groups in greater number than did the other stakeholders. They also had the greatest diversity in evaluation of the KERA Preschool Program. The community agencies that attended were Head Start, private child care facilities both for profit and non-profit, Easter Seals, and community agencies that provide a wide range of services to families with children with a disability. We also received written comment from community agencies that could not be present at the focus groups. (The results of one focus group of nine participants had to be omitted due to participants from more than one group [parents, teachers, administrators, community

representative] attending at the same time).

Generally it can be said that collaboration is working relatively well in rural areas of the state. In rural areas where resources have always been limited, and where there has already been a history of collaboration before the conception of education reform, this collaboration is working well.

However, in urban areas the story is different. In many cases, collaboration is working poorly or not at all. In both rural areas and urban areas, the community agency representatives agreed that the critical person in the collaboration issue was the superintendent, not other administrators or the school board.

Community agency representatives report that in almost all instances initial contacts about the KERA Preschool Programs and collaboration efforts were made by the community agency and not the school district. Some agencies report successful collaboration efforts immediately; some report that considerable work was needed and done cooperatively; and others reported that lawyers of the agency and school district were needed to finalize collaboration efforts. Still other agencies reported the need to involve their legislators in order to be included in the district's KERA Preschool plan.

The benefits of the KERA Preschool Program reported by the community agency representatives are many. They are pleased that early childhood education is now receiving the legislative and public awareness that it needs and deserves. They also applaud the fact that the legislature has provided more funding for children at risk of educational failure. Additionally, they see, and are pleased that more children are eligible for free services. Specifically they report that children who do not meet Head Start guidelines, but who do not have enough resources to afford private child care programs are now being served.

The rest of the issues raised by community agency representatives are dichotomous in that, in areas where collaboration is working well, they are a plus; and in areas where collaboration is not working well they are a minus. Community agencies in areas in which collaboration is working report that there is increased cooperation between community agencies and the school district. On the other hand, in districts where collaboration is not working, community agencies report that it has been their experience that school districts now claim that they are the experts in early childhood education and will deliver all the

services themselves, when many of the community agencies have been providing the same services for many years. These agencies also report that they can and do meet the standards for the KERA Preschool Program, have space available, and are willing to serve children with disabilities, and yet, were not considered as possible providers of services until they pushed the issue. They perceive that because they were assertive, knew the issues and stood up to the school districts, they are now seen as the troublemakers and the ones who are not being cooperative.

Community agencies in districts in which collaboration is working well have seen an increase in enrollment. These programs often do joint enrollment and refer back and forth when applicable. Community agencies in districts in which collaboration is not working report that they have lost children to the KERA Preschool Program. They also report that due to the KERA Preschool Program, some of their children are experiencing multiple placements during one day. For example, a child could be dropped off in the early morning at a child care center by her/his parent. The child receives breakfast before the school bus picks her/him up. The child is bussed to the public school where she/he receives breakfast again and participates in the Preschool Program. The child then gets on the bus again and is transported to the child care center.

Community agencies express concerns about duplication of efforts. They believe that children already enrolled in community programs could remain in those programs and receive the needed services. The children would then be receiving continuous service instead of spending up to two hours per day on a bus. Furthermore, families would need to become acclimated to only one program, not having to learn at least two teachers and aides, two policies and procedures, two eating routines, two classroom environments and two parent involvement/education programs. They question if additional services in more settings is good or if additional contracted services in one setting is better.

Many community agency representatives expressed the concern that children and families in the KERA Preschool Programs are segregated and isolated by income level and/or disability. Consequently, they are not being integrated with mainstream community children. Head Start representatives also supported this statement as they have not had the luxury of serving the 10% of children who do not meet their income guidelines, because the

community demand has been so great and their resource supply is limited.

Child care providers also expressed concern about how the KERA Preschool Programs might affect the total child care ecosystem. The cost of providing quality child care for children varies with the age of the child. Due to the need for more staff per child in infant and toddler settings, the cost is more for these very young children. The cost for older children is less as they are mobile, more competent and independent, and the adult/child ratios can be higher. Most child care programs spread the higher cost of infant/toddler care across the age spectrum. This allows infant/toddler care to be affordable to families. As more and more older children (3-and 4-year-olds) leave the system into full day publicly funded programs, or only attend part days, there are fewer children to share the costs. What may be created for families is an impossible situation in that their four-year-old may receive free part-day or full-day care and education in the public schools, but their infant child care may cost $200.00 per week.

Community agency representatives including Head Start also report that they have had teachers hired away from their programs. Several programs reported that their teachers were interviewed by a district one day and told that if they wanted the job they must begin the following day. This left the child care program without a classroom teacher and the children had to adjust to a substitute and then a new teacher. Concern was stated that the KERA Preschool Program should be concerned about the quality of programs for all young children and not just the ones established in the public school setting. It was also felt that through contracting, teachers and children could remain in programs with which they have bonded and still meet the needs of families who qualify for the KERA Preschool Program.

Community agency representatives also were frustrated by the fact that on the state level (from the Department of Education and legislators) they read and hear that collaboration is desirable and strongly encouraged, but that local officials' interpretation of the law is that the districts are to provide all of the services themselves. This inconsistency has sometimes been resolved and sometimes has not.

Where collaboration has progressed smoothly, community agency representatives feel secure and trust that the collaboration will continue. However, where collaboration has been rocky or in some cases "forced," the community agencies do not trust the district and feel

that as soon as the district can offer all the programs themselves that contracting and collaboration will no longer exist.

SUMMARY AND CONCLUSIONS

Overall the KERA Preschool Program has a good start when looking at program components. However there is not consensus with regard to collaboration, contracting, supplanting, and duplication.

1. Collaboration is working very well in some districts and not at all in other districts.

2. Classrooms were at or above the mean in all the areas of the ECERS except cultural awareness.

3. On all five family functioning dimensions, the family means ranked in the adequately healthy range.

4. Families are familiar with and use several positive child rearing practices.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

PART I: COST BENEFITS SUMMARY AND CONCLUSIONS

During the 1991-1992 school year, 12,540 children were served in the KERA Preschool Program. Slightly over half (54%) of the children were at-risk four-year-olds; whereas about 37% of them were three- and four-year-old children with disabilities. Approximately 8% of the children were neither at-risk nor disabled but were accepted by districts who opened their programs to noneligible children. Districts received no KERA funds for the non-eligible children but paid for them from district funds. In terms of the 11,484 eligible children who met criteria for KERA funding, 59% were at-risk and 41% were children with disabilities.

For school districts, the average per child expenditure from KERA Preschool funds was $2,655. However, when all funding sources and in-kind contributions were included, the total district per child expenditure was $3,805. This is still considerably below the $4,660 per child expenditure that the Government Accounting Office (GAO) found in its 1988 survey of high quality NAEYC accredited programs.

District preschool programs are funded primarily by KERA Preschool funds and supplemented by federal disability funds and local district funds. The largest portion of the program expenditures in school districts was for instructional salaries, with instructional materials and transportation costs ranking second and third. District and Head Start programs that utilize cost sharing indicate that they usually arrange exchange of services with one agency providing transportation and the other providing health and social services. Districts report that they have used start-up monies to help provide ongoing programming such as transportation, instructional salaries, and instructional materials.

Type I child care facilities reported that their revenue comes primarily from children's tuition and fundraising with, in some cases, state and federal support. Type I facilities spent a smaller proportion of their monies on instructional salaries and a larger proportion on instructional materials, administration, and overhead than did district programs. Type I facilities have costs for space, insurance, etc.; whereas, district programs have school district

support for facilities and services already in place in the district. Districts are more apt to hire certified teachers who qualify as Level I teachers; whereas, Type I facilities are more apt to hire Level III lead teachers and aides.

Overall costs were higher in school districts than in Type I facilities because of the higher qualifications and higher salaries of the teachers as well as larger expenditures for transportation and for health and support facilities. However, no measures of quality have been conducted with Type I facilities so no comparison between district programs and Type I facilities is possible at this time.

PART I: COST BENEFITS RECOMMENDATIONS

Several factors complicated the collection of timely and accurate information for these analyses of costs. First, the categories or line items requested in the RFP and therefore the budget sheets sent with questionnaires were in a different format than that used by school districts in their record keeping. Thus, it was necessary for districts to combine several categories to arrive at the requested information. This made it difficult and time consuming for them to respond to the questionnaires. A better match and more efficient and accurate recordkeeping could be accomplished if schools knew in advance the format in which the records would be reported at the end of the year.

A second problem was created by the ending date of this evaluation study. Since the report was due at the end of June, it was necessary to have the schools report end of year data by mid June. These data are not available until school ends and since the end of the school year is an exceptionally busy time for school districts, they found it difficult to respond to the questionnaires. We received a limited number of responses in time to be included in the report. In the future, more time needs to be allotted for the collection and analysis of end of year data.

Currently start-up monies are being used to cover a portion of instructional salaries, instructional materials, and transportation. Without start-up dollars after 1992, additional funding amounts will need to be considered for each program type to cover continuing costs of instruction and transportation. Furthermore, as more programs apply for NAEYC accreditation, it will be necessary to consider the increased funding needed to implement high

quality Preschool Programs.

More indepth analyses of both district and Type I programs need to be conducted to assess the nature and quality of the programs and the short- and long-term progress of the students who participated. Of particular interest are the qualifications of the teachers and whether or not the type of teacher preparation has an effect on program quality and student outcomes. We were unable to draw any conclusions about this question based upon the limited number of teachers in the Level III category in our study. No teachers in our district selected sample were at Level II.

PART II: STUDENT OUTCOMES SUMMARY AND CONCLUSIONS

Overall, there were some positive effects of participation in the KERA Preschool Programs for both the three- and four-year-old children enrolled in 1991-1992 and the kindergarten children who had participated in 1990-1991. Although a large number of three- and four-year-olds who were served in 1991-1992 did not pass the overall Battelle Developmental Screening Instrument, many of them passed the Personal/Social and Adaptive Domains.

The nature of the Battelle screening instrument and the decision to set a rigorous passing level at one standard deviation below the mean rather than at two standard deviations below results in fewer children meeting the criteria for passing. In a screening device with only a few items in each domain, the increments between items are much greater, so the instrument lacks the precision to indicate when a child might be approaching the next developmental milestone. The purpose of a screening instrument is to refer children for further evaluation not to diagnose children. Thus, a screening device tends to overrefer.

Furthermore, there was not a pre-test against which to compare the progress of the KERA participants. Because the study did not begin until January, there was not time to administer pre- and post-tests between January and the end of school in mid May. Thus, we had no way of measuring how far the children had progressed since they began the KERA program in August.

Teachers of the 1991-1992 participants ranked 90% of the children as average or better on the Social Skills Questionnaire. Since one of the major goals of the KERA

Preschool Program is to prepare students for success in school, this result suggests that the program is effective in that respect.

The comparison of kindergartners who had participated in KERA Preschool Programs in 1990-1991 with kindergartners who had not attended the program revealed that the KERA participants scored significantly better in overall development on the Battelle Developmental Screening Instrument and on the two domains of Adaptive and Total Communication. This is particularly impressive in view of the fact that the nonKERA children were more apt to be from advantaged homes and have no disabilities.

PART II: STUDENT OUTCOMES RECOMMENDATIONS

The Kentucky Department of Education needs to develop a comprehensive, long-term evaluation plan to monitor the progress of children in the KERA Preschool Program. The evaluation should consist of the following aspects.

1. Beginning in the 1992-1993 school year, a random sample of KERA preschool participants need to be given pre-tests on the Battelle and/or other appropriate measures during the first month of school and post-tests in May to reveal the progress they have made.

2. If possible, a control group of children who met the criteria but were not served in KERA should be identified so that parallel measures can be administered and a direct comparison made. This would allow researchers to draw stronger conclusions about the positive impact of the KERA Preschool Programs. Identification of a control group is difficult due to the effectiveness of recruiting for the KERA Program. It seems that most eligible children are being served.

3. Both the 1990-1991 KERA and nonKERA participants and the 1991-1992 KERA participants who were tested in this study should be followed during their primary, middle, and secondary school years to observe their short- and long-term success on school achievement measures and life success indicators.

4. Children with disabilities need to be monitored closely to assess the extent to which their IEP objectives are being achieved.

5. The relationship between student outcome data and classroom environmental variables needs to be analyzed so that implications for improving the quality of classroom environments can be drawn.

PART III: PROGRAMMATIC COMPONENTS SUMMARY AND CONCLUSIONS

Classrooms visited in this study were well above the mean on the Early Childhood Environmental Rating Scale. The sample classrooms generally have the equipment and learning center classroom arrangement that is desirable. However, some areas of concern were identified and need to be addressed in helping teachers move toward more developmentally appropriate practices.

Focus group interviews with various stakeholders revealed that the general attitude toward the Preschool Program is positive. All applaud the recognition of the benefits of early childhood education by the legislature and the public. People were pleased that additional funds were being channeled into KERA Preschool Programs. Participants felt that it would benefit the state in the future as more children and families are receiving needed services. Participants also valued the additional health screening and parent involvement components of the program.

The largest area of concern dealt with the failure of some districts to cooperate with existing early childhood programs. Some community agencies feel that they have been left out of the new programming even though they provide the same services, meet the KERA standards, and are willing to serve children with disabilities. Other community agencies reported "smooth sailing" as they collaborated and contracted with the school district to provide partial or total services to children and families.

PART III: PROGRAMMATIC COMPONENTS RECOMMENDATIONS

Four primary concerns related to the evaluation of the programmatic components will be addressed: a) learning environment, b) collaboration, c) parent involvement, and d) eligibility.

Learning Environment. Even though programs ranked above the mean on most aspects of the learning environment, continued improvement is needed particularly in the areas of concern noted in Part III. The following recommendations would help address these concerns.

1. Conduct indepth analyses of preschool classrooms to provide teachers with feedback about possible improvements. The regular use of the ECERS would be helpful in

this regard. Training in the use of the ECERS would facilitate this recommendation.

2. Identify exemplary classrooms so that they may be described in detail in written materials, videotaped, and visited as models.

3. Continue to encourage NAEYC accreditation and provide technical assistance in the accreditation process.

4. Continue to support and conduct preservice and inservice training on developmentally appropriate practice. Encourage use of the newly developed KDE integrated staff development package for preschool as part of this training.

5. Focus staff development efforts on improvement in the weakest areas of the classroom environment: child display, gross motor equipment, personal grooming, meals, dramatic play, and especially cultural awareness which was rated lowest on the ECERS.

6. Conduct research which would determine the relationship of levels of teacher preparation to program quality and child outcomes.

Collaboration. The major concern expressed by participants in the study was lack of coordination between district programs and already existing early childhood programs in the community. To address this concern, the legislature took steps in 1992 to mandate the involvement of Head Start personnel in planning the Preschool Program in each district. To prevent duplication of service and supplanting of Head Start funding, the degree of cooperation needs to be closely monitored. Additional steps could include:

1. Showcase programs where collaboration is working well and provide opportunities for these collaborative strategies to be disseminated throughout the state.

2. Conduct research to identify variables associated with successful collaboration.

3. Encourage districts to join local Preschool Interagency Planning Councils (PIPCs).

4. Provide staff development for principals, superintendents, and preschool program directors regarding effective, innovative methods of collaboration.

5. Monitor and investigate referral to and collaboration with social services and health services.

Parent Involvement. Both teachers and principals reported that the parent involvement component is important but is not working as well as hoped. The fact that no parents attended the parent focus group sessions supports these expressed concerns.

Teachers reported that there was not time to fully implement the parent involvement component. This was especially a problem for teachers who taught double sessions in five-day-a-week programs and thus had to conduct visits at night or on weekends with no extra compensation. Principals saw a need for a greater variety of parent involvement options. To address these problems, program developers need to:

1. Ensure that teachers have adequate time built into the day for involving families and for making home visits.

2. Provide training for principals and teachers in ways to involve parents in supporting their children's education.

3. Encourage collaboration between Preschool Programs and Family Resource Centers.

Eligibility. Overall, the most frequently suggested recommendation from major stakeholders was to make the KERA Preschool Program available to all four-year-olds not just children who are at-risk or who have disabilities. Participants felt that state funds should be available for all children to attend the programs. This would alleviate the concern expressed by several participants regarding the segregation by income and disability of KERA children from their mainstream peers. Segregation is not the intention of KERA. Allowing all children to participate would prevent segregation of at-risk children and families. Before moving toward full inclusion of all four-year-olds, however, the effect of full inclusion on the total child care ecosystem must be addressed. Better coordination between KERA Preschool Programs and other providers of preschool education will be necessary. Schools and private service providers must establish collaborative contractual relationships to prevent duplication of services and supplanting of funding from other sources.